



# **PARTNER OF:**







### INTRODUCTION

Dear customers, partners and friends,

You have before you the latest edition of the Lotek IMO catalog. Where our previous edition had a somewhat shorter lead time, this edition is again fully up-to-date for the next two years.

As we leave the pandemic and subsequent crisis behind us, we also realize that the various maritime and offshore sectors have had difficult years. However, we now look to the future with energy and expectation and see great developments in several areas.

#### **Product development**

The past two years have been used by us to develop new products and services that you will find in this catalog. The most striking is our solution for a phenomenon that is unfortunately increasing and can cause a lot of damage: Ev car fires on board ferries and car carriers. The Fire Isolator concept provides a quick solution to prevent additional damage and gain time until the EV can be safely submerged. With a complete concept, including training, we offer ferry operators, car carriers, distributors/dealers and safety suppliers a proven effective concept.

Also our newly launched line of LED Escape signs can be considered innovative, as these LED escape signs maintain a clear visibility for over 3 hours even without emergency power.

#### Safety signage implementation and measurements

It is clear that a consistent and effective safety signage system is more than a collection of signs. We combine years of experience in implementing an effective and compliant safety signage system with a complete range of high-quality signage that ensures a low total cost of ownership. Contact us to have the situation on your ship(s) assessed.

We hope you can find your desired products and services in this new catalog. Be sure to check out our website for the latest news and to download specific documentation: www.lotek.dk

Enjoy reading.







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### **INTRODUCTION**

Life-saving products are of great importance in operating safely at sea, whether on a ship or at an offshore location. Choosing the right equipment to protect your personnel, guests or materials is the most important task of any ship owner or offshore asset owner, while always looking for value-for-money: the highest quality for the lowest price.

#### Certified and approved safety products that you can rely on

We offer a selective range of Safety Products for the marine and offshore market to protect your people and your business. All of our products come with all the required certificates and approvals and are priced on a very competitive level. We aim to be at the forefront of maritime safety and are constantly developing (both inhouse and in cooperation with our trusted partners-suppliers) new products based upon our solid reputation for quality and innovation. One thing we never compromise on, is our quality. All our maritime safety products meet the strictest standards for design, testing, documentation, are compliant with local regulations and international standards. T-ISS offers safety products that are cost-efficient, easy to use and above all, will give the owner and user peace of mind. All our maritime safety products are globally available through an extensive network of stockists and distributors.

#### Our experience and quality is your advantage

T-ISS was established in 2003 and is an ISO9001:2015 approved company. The people behind the company have decades of experience in the Marine Industry. We perfectly understand the importance of reliable, accessible and good price-quality ratio products, services and turn-key solutions. Our products meet all the international quality standards and hold all the relevant certificates and approvals. As a result, they are recognized by most benchmark systems and regulatory authorities.

#### **Environment, health and safety**

T-ISS as a company is dedicated to environmental safety and health, at all levels of its operations, from manufacturing to installation. Because of this, we have our own Environmental, Health and Safety policies. These are part of the T-ISS company policy, and reflect our principles of running a sustainable business.

- Creating a safe working environment for all employees and stakeholders
- Minimizing the carbon footprint
- Integrating EHS elements into T-ISS Research & Development strategies for all company products and systems
- Continuous measurement, monitoring and improvement of EHS performance



































# HYDROSTATIC RELEASE UNIT (HRU











#### **General description**

The T-ISS Seamate Ve-1 Hydrostatic Release Unit or HRU is a pressure activated mechanism designed to automatically deploy that clears your life raft or EPIRB to float up to the surface. In the exceptional situation a vessel sinks, the HRU will activate and release the life raft or EPIRB on a depth between 1,5 and 4 meters.

The pressure of the water on the casing causes a knife to cut through a rope and thereby releasing the life raft. This same principle applies on the HRU for EPIRB's, whereby the bracket which holds the EPIRB is released. The EPIRB model is delivered with the bolt and nut to connect the EPIRB to your vessel.





The product should only be replaced every 3 years during the standard service interval of the life raft or EPIRB. Because of the simple and quick assembly of the HRU, downtime on shore is reduced to an absolute minimum.



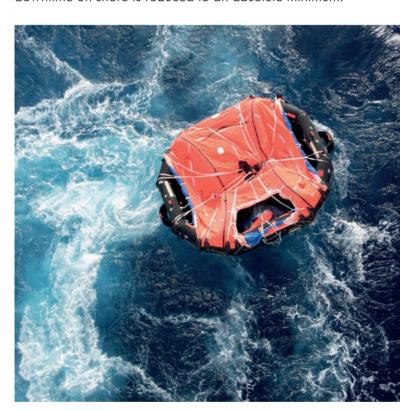
#### **Technical data**

165 x 75 x 65 mm Dimensions: Approx. 0,25 kg Weight:

#### **Benefits & Features**

The innovative design and the high quality of our HRU's increased the reliability, which is why the T-ISS SeaMate Ve-1 has an expiry life of 3 years and can be used in all weather conditions, from extreme heat to the polar environment. This means you only have to replace the HRU every 3 years, instead of 2 years which is the standard. Besides cost saving, 3 years expiry also reduces the environmental impact.

We can provide you with five different HRU models, each with a different application. A basic model for 6 to 150 pax, a basic model for 1 to 12 pax, an EPIRB model, a remote released model and a combi model.







#### **HRU HOOKS**

T-ISS can supply you with various hooks which are suitable for our HRU-models and are made out of seawater resistant SS316 Stainless Steel. They have a breaking strength that complies with the ISO regulations ISO6892. All hooks are packed in sets of 10 pieces.



HRU carabineer HRUHK-CA

HRU sliphook HRUHK-SL

HRU shackle HRUHK-SH

### **Approvals**

- Russian Register
- · DNV
- USCG
- Korean Government

#### **Standards**

• In compliance with ISO 15734

Article number	Description	IMPA	ISSA
HRU001-L	Seamate HRU for liferafts 6-150p	330119	4700802
HRU002-E	Seamate HRU for epirb bolt	330126	4700803
HRU003-M	Seamate HRU mini for liferafts 1-12p	330126	4700803
HRU004-R	Seamate HRU remote released model	330126	4700803
HRU005-C	Seamate HRU combination model	330119	4700802
HRUHK-CA	HRU carabineerhook (10 pcs)		
HRUHK-SL	HRU sliphook (10 pcs)	*	*
HRUHK-SH	HRU shacklehook (10 pcs)	4	L.

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# LIFERAFT / RESCUE BOAT HOOK PX01







#### **General description**

The T-ISS Liferaft / Rescue boat hook PX01 is a combined automatic release hook which can handle rescue boats and liferafts up to a safe working load of 35 kN. This hook can be used for rescue boats with a davit load less than 3500 kg and/or a davit launched liferaft up to 40 pax.

The PXO1 release hook has two modes of operation to allow for safe evacuation regardless of the conditions:

- 1. Automatic release when the craft enters the water.
- 2. Manual release when waterborne if auto-release is not possible due to added load on the reserve boat while being towed or when sea conditions are bad.

#### Technical data

Maximum SWL: 3500 kg

Material: Stainless steel 316 / Duplex

Service life: 5 years

#### **Benefits & Features**

The PX01 will increase safety, as the crew only need to familiarize themselves with one hook, instead of two. There is no second hook, dangerously swinging around when lowering. In distress situations the crew will instantly know which hook to use, as there is only one hook. The most economical solution, why buy two hooks if one is sufficient?





### **Approvals**

- RINA
- EC Directive 96/98EC on Marine Equipment (MED)

- LSA Code for Hooks for Liferaft Launching, as amended MSC.81(70).
- Fully compliant with updated SOLAS requirements as per Resolutions MSC.320(89) and MSC.321(80).

Article number	Description	Dimensions	Weight
RELHK-PXO1	Automatic release hook (liferaft/rescue boat) 35kN	260 x 260 x 70 mm	Approx. 8,5 kg
REPL-PXO1	Maintenance / Replacement set PX01	u .	700 gr



# LIFERAFT RELEASE HOOK PX02







#### **General description**

The T-ISS Liferaft release hook PXO2 is an automatic release hook for davit launched liferafts, which can handle a safe working load of 25 kN. The hook can be operated as an automatic release hook, releasing when the raft enters the water, or as a manual release hook.

#### Technical data

Maximum SWL: 2500 kg Stainless steel Material: Service life: 5 years







#### **Approvals**

- RINA
- EC Directive 96/98EC on Marine Equipment (MED)

- LSA Code for Hooks for Liferaft launching, as amended MSC.81(70).
- Fully compliant with updated SOLAS requirements as per Resolutions MSC.36(63), MSC.48(66) and MSC.81(70).

Article number	Description	Dimensions	Weight
RELHK-PXO2	Automatic release hook (liferaft) 25kN	300 x 190 x 90 mm	Approx. 8,2 kg
REPL-PXO2	Maintenance / Replacement set PX02	(Se	800 gr



# **RESCUE BOAT RELEASE HOOK PX03**







#### **General description**

The T-ISS Rescue boat hook PXO3 is a manual release hook for rescue boats, which can handle a safe working load of 15 kN. The hook is easy to operate/maintain and comes with a 5 year service life. The hook is designed to be opened manually and can be operated by one person. By pushing the release handle in the upward position, the hook will open.

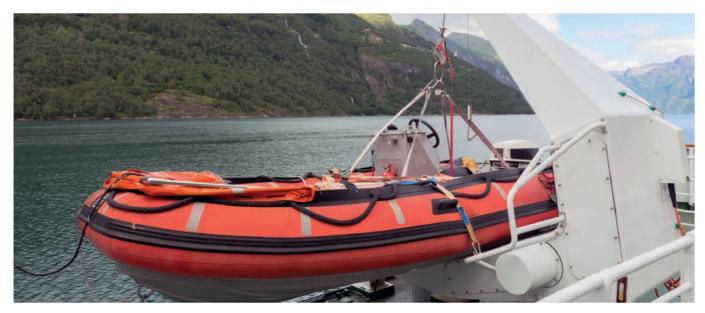
#### **Technical data**

Maximum SWL: 1500 kg

Material: Stainless steel 316 / Duplex

Service life: 5 years





#### **Approvals**

- RINA
- EC Directive 96/98EC on Marine Equipment (MED)

- LSA Code for Hooks for Liferaft Launching, as amended MSC.81(70).
- Fully compliant with updated SOLAS requirements as per Resolutions MSC.320(89) and MSC.321(80).

Article number	Description	Dimensions	Weight
RELHK-PXO3	Manual release hook (rescue boat) 15kN	260 x 135 x 60 mm	Approx. 4,5 kg
REPL-PXO3	Maintenance / Replacement set PXO3	-	600 gr



### EMERGENCY ESCAPE BREATHING DEVICE





#### **General description**

Light, compact and easy to use, our Emergency Escape Breathing Device (EEBD) is perfectly adapted to confined spaces onboard your vessel. It's designed to escape from toxic or oxygen deficit environments, which require easy and immediate donning. The EEBD is packed in a handy carrying bag. Positive pressure in the hood eliminates any risk of inhaling toxic gases. An alarm indicates when the air supply is about to run out.

#### **Technical Data**

Cylinder working pressure: 210 bar Cylinder capacity: 3 |

Duration: 15 minutes

Non-pressurized delivery

#### **Benefits & Features**

The T-ISS EEBD is intended to be used to escape from a machinery space and be carried by fire fighters to give personnel in need of assistance. An EEBD is not intended to be used for fire- fighting purposes or entering oxygen-deficit or toxic environments, for firefighters use our SCBA. This EEBD is designed according to Chapter 3 - Fire System Safety Code (FSSC)/2.2. A training version of this EEBD is also available.









Lloyd's Register & ABS approved cabinets. To order separate.

# Approvals (EEBD)

- DNV module B&D
- Wheelmark

- Complies with SOLAS 74 and reg. 11-2/13.3.4 and 13.4.3
- Complies with TS EN 1146/15 incl. A1, A2 and A3

Article number	Description	Dimensions	Weight	IMPA	ISSA
EEBD15	EEBD	530 x 250 x 150 mm	Approx. 6 kg	330438	4721101
EEBDC	EEBD cabinet	762 x 282 x 211 mm	Approx. 4 kg	5 <del>.</del> 7	en.
EEBDH	EEBD hood	.*	-		<b>(4</b> )
EEBDB	EEBD bag	2	2	-	2



# **SELF-CONTAINED BREATHING APPARATUS**





#### **General description**

The SCBA is a Self-Contained Breathing Apparatus, with a six liter volume steel cylinder, positive pressure. This self-contained breating respirator is used by fire-fighters and emergency rescuers. The full package includes a steel cylinder, full face mask, back strap, supply valve, alarm whistle, pressure reducer and completely packed in a carrying bag. The alarm pressure is set at 46 Mpa.

#### **Technical Data**

Pressure: 300 bar Cylinder: Alloy steel, 6 l Working time: 60 minutes







#### **Approvals**

- DNV MED module B&D
- Wheelmark

Article number	Description	Dimensions	Weight
SCBA-RIZK6/30	Self-Contained Breathing Apparatus	700 x 300 x 480 mm	Approx. 16 kg



### **ROLALUX VHO1 ROLLDOWN CASSETTE**

#### **General description**

SOLAS regulations require a permanent display of the general arrangement plans on a ship's bridge (GA plan, Fire Safety plan and Escape plan). The Rolalux VH01 Rolldown Cassette gives you the opportunity to store 1 up to 3 different plans in the space. It is required that the general arrangement plans are kept up-to-date. Because of this, the VH01 Rolldown allows for easy replacement of the plans. You can simply remove and replace all three plans in the Rolldown system easily.

Safety and evacuation plans should be permanently available to support the captain and officers on ships above the 20 meters. On the drawings a number of things must be clearly highlighted:

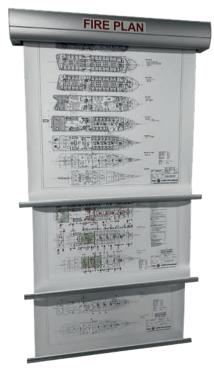
- Where to find the control station on each deck
- Where parts of the ship are enclosed by fire resistant bulkheads
- And the general data of the fire alarm systems

#### **Technical data**

Material: aluminium anodised

#### **Benefits & Features**

- Store 1-3 plans in the space
- Easy replacement of plans
- Meets SOLAS regulations (Chapter II-2, Regulation 15.2.4)
- Modern design and solid mechanism
- Ensures a clean, well-arranged bridge
- Wall or ceiling mount possible
- Other dimensions available on request







Article number	Description	Dimensions	Weight
RDCA0	Rolalux VH01 alu for safety plans	1000 x 125 x 130 mm	Approx. 4,5 kg
RDCA0-T	Rolalux VH01 alu incl. 1-3 safety plans	1000 x 125 x 130 mm	Approx. 5,0 kg



# FIRE PLAN CONTAINER

#### **General description**

The T-ISS Fire plan container is a watertight container that stores a copy of a fire plan and / or an escape route plan. As we've recognized that fire plan containers are damaged easily, we have developed a stainless steel fire plan container, which resists the harsh maritime environment. Fire and safetyplans must always be exhibited for the guidance of the ship's crews showing clearly for each deck as required by the SOLAS Chapter II Reg. 15/2.4.1 and 2.4.2.

#### **Technical Data**

Packaging: 2 containers / box

#### **Benefits & Features**

- Will last your ships lifetime
- Resistant to weather influences unlike PVC/plastic containers
- Suitable for all the standard plan sizes
- Watertight / marine environment resist
- Stainless Steel container
- Comes with photoluminescent "Fire plan" or "Fire and Safety plan" sign and sticker
- Comes with wall mounting brackets





#### **Standards**

 Complies with IMO / SOLAS II-2 15/2.4.1 and 15/2.4.2.

Article number	Description	Dimensions	Weight	IMPA	ISSA
FPC	Fire plan container (incl. sign and sticker)	980 x 100 mm	Approx. 2,2 kg	332613	7585200



### INTERNATIONAL SHORE CONNECTION & BOX

#### **General description**

The goal of the International shore connection is to keep a standby hose attachment to get a connection from shore or from other ships for onboard firefighting, in case there is a total failure of pumps onboard.

While using the International shore connection, the sea water is supplied at a pre-decided pressure and is connected to the ship's fire main.

#### **Technical Data**

- 1.0 N / mm2 maximal pressure
- 2" thread

#### **Benefits & Features**

- Designed to last in the tough marine environment
- BMC glass fiber polyester box, flame retardant
- Cabinet door can be opened both the right and left direction
- Stainless Steel lock and hinges
- Comes with applied SafeSign sign with 5 year warranty, even on outdoor use







Box with flange

Article number	Description	Dimensions	Weight
ISC-C	International shore connection complete (box, flange, sign)	$285 \times 260 \times 70 \text{ mm}$	Approx. 7 kg
ISC-B	International shore connection box	$285 \times 260 \times 70 \text{ mm}$	Approx. 4 kg
ISC-F	International shore connection flange	Ø 175 mm	Approx. 3 kg



# **BESTO INFLATABLE TWIN CHAMBER LIFEJACKET**



#### **General description**

The Besto 300 Newton inflatable twin chamber lifejacket is an automatically operated lifejacket designed in accordance with the latest SOLAS/MED requirements and is designed for use on open sea and in het most extreme weather conditions.

#### Technical data

Wearing size: 43+ kg Buoyancy: 300N CO<sub>2</sub> cylinder: 2x 60 g

#### **Benefits & Features**

- Cordura cover and tailored design
- Strong zipper
- Twin chamber lifevest for optimal safety
- Fleece collar for extra comfort
- Orange and yellow model feature easy wipe clean fabric
- Double crotch strap
- Safety harness
- Standard system: Halkey Roberts V90000 or United Moulders MK5
- Also to be used when wearing heavy protective waterproof clothes







#### **Approval**

Wheelmark

#### **Standards**

 SOLAS 74/96, IMO Res. MSC.48(66) & Res. MSC.54(66) and A689(17).

Article number	Description	
LJI-TW-RD	Besto 300N Twin chamber lifejacket	
LJI-TW-YE-WC	Besto 300N Twin chamber lifejacket	
LJI-TW-OG-WC	Besto 300N Twin chamber lifejacket	
LJI-TW-RS	Recharge set	

Color/model	Dimensions	Weight
Red	$530 \times 260 \times 50 \text{ mm}$	1,75 kg
Yellow (wipe clean)	$530 \times 260 \times 50 \text{ mm}$	1,75 kg
Orange (wipe clean)	530 x 260 x 50 mm	1,75 kg
-	240 x 115 x 35 mm	0,30 kg



### BESTO INFLATABLE PROFESSIONAL STYLE LIFEJACKET

#### **General description**

The Besto 300 Newton inflatable professional style lifejacket is an ergonomic offshore working jacket and can be used in the most extreme weather condition. The lifejacket will always rotate the body so the airways are clear of the water.

This model has a good body fit due to the soft outer cover and special neck shape. The collar is strapped onto the back, this gives a comfortable neck fit. Also it gives a good neck/ head support when the jacket is inflated.

The jacket comes standard with a crotch strap to enhance performance and freeboard. The jackets are finished with edge binding all-around and has a floating capacity of 300N. The jackets are available in various colours.

#### **Technical data**

Wearing size: 40+ kg Buoyancy: 300N CO<sub>2</sub> cylinder: 60 g

#### **Benefits & Features**

- Also to be used when wearing heavy protective waterproof clothes
- Automatic and manual activation
- Two reflective strips for better visibility







Fire Retardant

<b>RFSTO</b>
≈ LIFESAVER SINCE 1928 ≈

Article number	Description	Color/model	Dimensions	Weight
LJI-PR-BK-WC	Besto 300N professional style lifejacket	Black (wipe clean)	$560 \times 300 \times 50 \text{ mm}$	1,22 kg
LJI-PR-YE-WC	Besto 300N professional style lifejacket	Yellow (wipe clean)	$560 \times 300 \times 50 \text{ mm}$	1,22 kg
LJI-PR-OG-WC	Besto 300N professional style lifejacket	Orange (wipe clean)	$560 \times 300 \times 50 \text{ mm}$	1,22 kg
LJI-PR-SR-FR	Besto 300N professional style lifejacket	Silver (fire retardant)	$560\times260\times50~\text{mm}$	1,20 kg
LJI-PR-RS	Recharge set	-	240 x 115 x 35 mm	0,30 kg



### LIFEJACKET LIGHT





#### **General description**

The automatically water-activated LED lifejacket light with "off" function, is a 5-year SOLAS lifejacket light certified to use Alkaline batteries instead of standard Lithium batteries, simplifying light disposal on expiration. It significantly exceeds the requirements on brightness and duration. It's a very compact and the thin design and equipped with light bubble/ dome, but the integrity of inflatable lifejackets will be maintained. It is delivered with a clip, which fits almost any lifejacket.

The light is deactivated by pressing the power button on the front side. If the light after disruption is brought back to automatic mode, and water contacts are dry, splash water on the contacts and the light goes on again. Activation and deactivation is clearly marked on the label.



#### Technical data

Light dome: 4 mm

Operation life: Min. 24 hours Light intensity: 0.75cd light Shelf life: 5 years

#### **Benefits & Features**

- Automatically water activated and manual off switch
- High visibility orange color
- Supplied with a clip
- Operating temperature from -1 °C up to +30 °C
- Compatible with almost all standard lifejackets
- Made of waterproof ABS & Polycarbonate



Also available a water-activated LED lifejacket light with Lithium battery (in stead of Alkaline battery) in blue bright color.



#### **Approval**

Wheelmark

- SOLAS/MED
- USCG

Article number	Description	Dimensions	Weight	IMPA
LJL-WA	Lifejacket light Alkaline	62 x 30 x 22 mm	Approx. 44 gr	330143
LJL-WL	Lifejacket light Lithium	52 x 30 x 31 mm	Approx. 24 gr	330143



# **LIFEBUOY LIGHT**



#### **General description**

Koyro Lifebuoy light K36 is well known throughout the global market as a reliable and efficient lifebuoy light. Batteries are replaceable and the lifebuoy light comes with brackets. It is designed to withstand the toughest rigours of the maritime environment and is completely watertight, corrosion-resistant and delivers, as a minimum standard, an omnidirectional over 2CD output for a minimum of two hours. The lifebuoy light is marked with SolasFlex Retro Reflective Tape for better visibility.

#### **Technical Data**

Connecting line: 1,5 m

Light power source: 1 alkaline battery Ignition method: Mercury switch

#### **Benefits & Features**

- Long lasting
- High visibility
- High safety
- Replaceable batteries
- Includes mounting brackets
- LED light
- Equipped with SolasFlex Retro Reflective Tape





#### **Approvals**

- Korean Register
- Wheelmark

- Complies with IMO / SOLAS MSC 81(70)
- Complies with MED Directive 96/98/EC and 2002/75/EC

Article number	Description	Dimensions	Weight
LBL-K36	Lifebuoy light K36	79 x 79 x 171 mm	245 gr



# **PILOT LADDER**





### **General description**

The pilot ladder is used for the pilot and crews getting in and out the vessel in normal situations. The pilot ladder has a spreader which is different from the embarkation ladder. The steps of each ladder are made of hard wood except for the last 4 steps, which are made of rubber.







Step: Hardwood (beech wood)

The 4 lower steps of ladder are made of rubber

Spreader: Hardwood (beech wood)
Side Ropes: 4 Strand Manila rope
Step Thimbles: Hardwood (beech wood)

Rope clamp: Aluminium



#### **Approvals**

- Istituto Giordano
- Wheelmark

- Complies with IMO Res. A1045(27), MSC / Circ. 1428
- ISO 799 (2004), SOLAS 74 Conv. as, amended Reg. V23, X/3

Article number	Description	Dimensions
PILOT	Pilot ladder MED approved (custom length)	Please specify required length



### **EMBARKATION LADDER**







An embarkation ladder extending from the deck to the waterline in the lightest seagoing condition under all conditions of a trim of up to 10° and a list of up to 20° either way, shall be provided at each embarkation station or at every two adjacent embarkation stations for survival craft launched down the side of the ship.





#### **Technical data Embarkation ladder**

Step: Hardwood (beech wood)
Spreader: Hardwood (beech wood) Side

Ropes: 4 Strand Manila rope Step Thimbles: Hardwood (beech wood)

Rope clamp: Aluminium

### **Approvals**

- Istituto Giordano
- Wheelmark

- Complies with IMO Res. A1045(27), MSC / Circ. 1428
- ISO 799 (2004), SOLAS 74 Conv. as, amended Reg. V23, X/3

<b>Article number</b>	Description	Dimensions
EMBAR	Embarkation ladder MED approved (custom length)	Please specify required length



# MAGNET LADDER LOCKER



#### **General description**

The T-ISS Magnet ladder locker is designed to create a safer environment for staff & harbour pilots by providing safely removable anchor points for the ladder on the ship's side. The magnets are lightweight for easy handling, yet immensely strong, providing more than 500 KG of lift & pull ratings. The Magnet ladder locker is powder coated in bright orange for high visibility and is made to withstand the marine environment. It has no internal moving parts or entry points for sea water.

#### **Technical Data**

Lift rate: 500 kg Pull rate: 520 kg

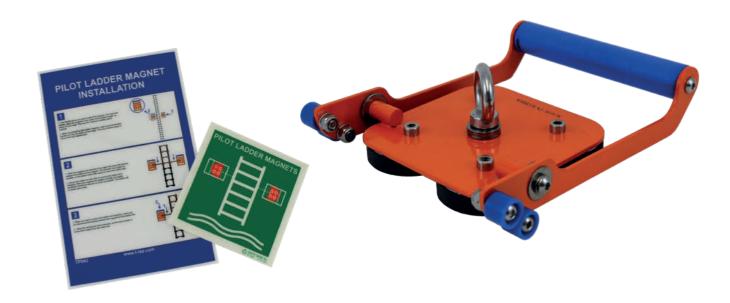
#### **Benefits & Features**

The release handle will enable crew to remove the magnet from the hull easily and without excessive force. All T-ISS Magnet ladder lockers are standard supplied in a sturdy wooden storage box and comes with an IMO-type instruction poster, Storage Location sign and tightening belts.

#### Set consists of:

- 2 pieces of the Magnet ladder locker
- 2 pieces of the Tightening Belt (IMPA 23.20.94)
- Sturdy wooden storage box
- IMO-type instruction poster / self-adhesive backing
- IMO-type location sign / self-adhesive backing





#### Approval

· DNV

#### **Standards**

Complies with IMO / SOLAS A.1045(27)

Article number	Description	Dimensions	Weight
MT500	Magnet ladder locker (2 pcs)	260 x 230 x 90 mm	Approx. 4,3 kg
SSH	Sling with snap hook (2 pcs)	$360 \times 50 \times 5$ mm	127 gr



# PNEUMATIC LADDER LOCKER



#### **General description**

The T-ISS Pneumatic ladder locker is used to secure the bottom of the accommodation ladder or gangway to the ship's side. The locker works with a vacuum pressure, supplied from your deck air supply. The Pneumatic ladder locker is the tool to increase safety on high free board vessels when accommodation ladders are used by the crew or pilots.

#### **Technical Data**

Lift rate: 300 kg Pull rate: 850 kg

Required: Compressor 1 HP or more

#### **Benefits & Features**

The Pneumatic ladder locker is supplied in a sturdy storage box and comes with IMO type storage sign and instruction poster. Also, an air hose connection is included as well as a tightening belt. A compressor with a minimum of 1 HP is powerful enough to supply this system.

#### Set consists of:

- Pneumatic ladder locker
- Tightening belt (IMPA 23.20.94)
- Sturdy wooden storage box
- IMO-type instruction poster / self-adhesive backing
- IMO-type location sign / self-adhesive backing





#### **Approval**

· DNV

#### **Standards**

Complies with IMO / SOLAS A.1045(27)

Article number	Description	Dimensions	Weight
PNLVE-2	Pneumatic ladder locker	250 x 210 x 100 mm	Approx. 3,2 kg
SSH	Sling with snap hook (2 pcs)	$360 \times 50 \times 5$ mm	127 gr



# PNEUMATIC LINE THROWER







#### **General description**

The BLT 250 Line thrower is a pneumatic system which throws projectiles by a compressed air system. It has 4 interchangeable launchers and the projectiles are easy to refill. Meets the demands of SOLAS/IMO regulation 74/83. Projectiles reaches approximately 250 meters, are only effected from crosswind and reach the maximum speed at the end of the launcher. All items are reusable and shelf life is unlimited. The only cost for four throws, is refilling the cylinder with your air compressor.

#### **Technical data**

Weight throwing unit 8,3 kg
Weight projectile 2,1 kg

Materials Aluminium, Stainless steel, MS58 Brass,

PVC and ABS

Shooting chamber pressure

Maximum Recoil

Average Nozzle Velocity

Number of shots

65 bar

5400N

50,6m/s

Aluminium air cylinder pressure 200 bar Aluminium air cylinder volume 2 l



#### **Benefits & Features**

- No explosion, useable from and into flammable areas
- Complete set (4 projectiles, throwing unit, user manual, sturdy orange carrying bag)
- Optional wooden storage box available







#### **Approvals**

- RINA
- USCG
- Wheelmark

### **Standards**

SOLAS/IMO regulation 74/83

Article number	Description	Dimensions	Weight	IMPA
BLT250	BLT 250 Line thrower	1000 x 220 x 200 mm	Approx. 21 kg	331345
BLT250-BOX	Wooden box for BLT 250 Line thrower	$1060 \times 320 \times 320 \text{ mm}$	Approx. 10 kg	331345



### **EMERGENCY LEAK AND SEAL REPAIR KIT**

#### **General description**

The T-ISS Emergency Leak and Seal repair kit is a complete response kit that enables immediate action when situations demand it. Leakage on flanges, on piping or even a leaking drum can be sealed quickly and efficient. A wrench and water are all that's needed to use the ELS kit, no special training is required, but make sure the crew is familiar with the kit and working procedures. The ELS kit is versatile; use it for hazardous and non-hazardous chemical service.

#### The contents of the ELS kit:

- Sturdy plastic carrying box
- Rubber hammer
- Utility knife
- Wooden pins (8 pcs)
- Wooden wedges (8 pcs)
- Speed steel stick
- Fast plastic stick
- Rubber sheet (500 x 500 mm)
- Drip Stop Tape (3 sizes: 25/38/50 mm)
- Spray Control Tape (50 mm)
- Spray Stop Tape (35 mm)
- Pipe Repair Tape (3 sizes: 2",3",4")
- 3 pair of gloves





Article number	Description	Dimensions	Weight	IMPA
ELS-KIT	Emergency Leak and Seal repair kit	475 x 215 x 265 mm	7,2 kg	812368



# **ASBESTOS SAFETY KIT**

### **General description**

The T-ISS Asbestos safety kit, is a product to safely remove asbestos debris during the operation of a vessel. This product is used by a vessels crew to remove any harmful asbestos materials in a safe way, while the ship is operating at sea. The kit is not meant to be used for large scale asbestos removal, for example during the docking of the vessel.

All items in the kit are produced according to the EU quality standards for asbestos removal. All parts are approved by certified companies. The kit comes with a clear instruction manual that shows how to use it in a safe and adequate way.

The Asbestos safety kit contains the following items:

- HEPA vacuum cleaner including cleaner bags
- Personal Protective Equipment (PPE)
- Asbestos waste bags
- Asbestos warning stickers
- Duct Tape
- Glue spray
- Spray bottle with impregnating fluid
- Full instruction manual
- All certificates











### **Approvals**

- KIWA Oesterbaai
- DNV
- RINA
- BUREAU VERITAS
- Lloyd's Register

Article number	Description	Dimensions	Weight	IMPA	
ASB-KIT	Asbestos safety kit	610 x 810 x 450 mm	25 kg	330967	





EV-CAR FIRE PROTECTION





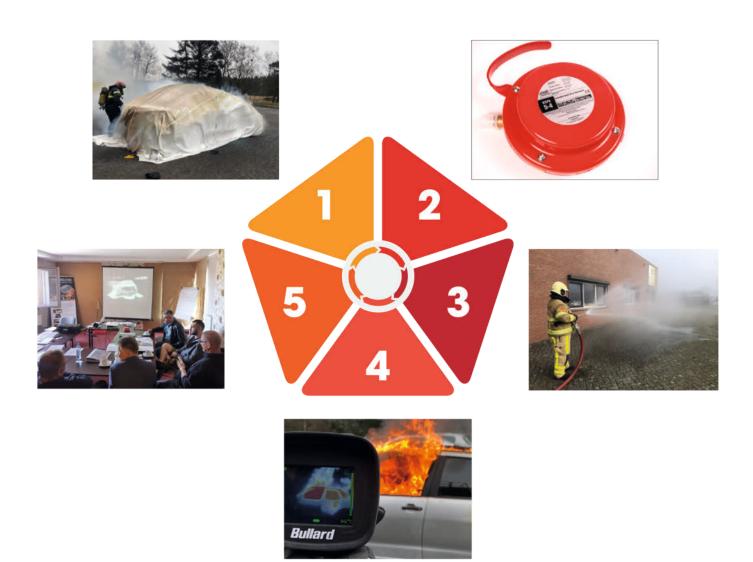
# **EV FIRE PROTECTION**

# ABOUT THE FIRE ISOLATOR CONCEPT

In general, there is no single solution to extinguish EV car fires. Most specialists agree that more than one solution should be available on board ferries or in carparks. Once an EV fire occurs on a ship, the shipowner/captain must be able to reach the nearest port as soon as possible to keep damages to an absolute minimum. In case of an EV on fire in a car park, the goal must be to minimize the collateral damage. Specialists with a long track record of fighting E-fires figured out what the best method to fight an EV fire is in order to have minimum damages towards cargo & passengers. The conclusion was that a combination of different methods delivers the best results. With this best practice, the concept of Fire Isolator was born.

The Fire Isolator Concept holds 5 elements that, when used together, deliver the best results when fighting EV-fires on board ferries or in car parks:

- 1. The use of a High Temperature resistant Fire Blanket
- 2. The use of aerosol units that interrupt the chemical chain reactions occurring in the flames
- 3. The use of a Water Mist lance
- 4. The use of a thermal imaging camera to monitor the temperature of the burning EV
- 5. Training of the crew in this concept





# EV FIRE ISOLATOR PRODUCTS



# FIRE ISOLATOR BLANKET

The Fire Isolator Blanket is the best way to control and isolate car fires for All-Electric Vehicles (EVs) as well as normal cars. The Fire Isolator Fire Blanket will directly assist in containing the flames, smoke and toxic fumes. The blanket is temperature resistant up to 1600 °C, and is easy to place over the vehicle because of the coloured loops. This blanket is available in multiple sizes upon request.



# FIRE ISOLATOR AEROSOL UNITS

Our Aerosol Units are lightweight, hand-held units designed to provide portable fire extinguishing. Aerosol Units are perfect for providing control of the situation together with the Fire Isolator blanket, can save valuable time, prevent a flashover and bring the temperature of the fire down dramatically, to around 200 °C.



# FIRE ISOLATOR WATER MIST LANCE

The Fire Isolator Water Mist Lance is your assistant in quickly and efficiently reducing fires in EV vehicles. The Fire Isolator Water Mist Lance can penetrate directly into the battery in an easily accessible location. This method allows water to enter the battery cells directly. The lance only needs to be inserted at a small depth.

Article number	Description	Dimensions	Weight
FI-BL0906	Fire Isolator blanket 0906	9 x 6 m	37 kg
FI-AUCA2	Set of 2 Aerosol units in box	205 x 165 mm	2,1 kg
FI-WMLANCE	Water Mist Lance set	300 x 1350 mm	5,5 kg
FI-BCAM	Thermal camera Bullard		
FI-FAX	Fireman's axe high voltage	900 x 200 x 30 mm	2,6 kg
FI-BOX	Reinforced Plastic Storage Box	1450 x 550 x 450 mm	24,5 kg
FI-KIT	Complete kit: GRP Box, Blanket, case with 2 aerosol units, water mist lance, Axe, Instruction poster	1450 x 550 x 450 mm	72 kg



### FIRE ISOLATOR ACCESSOIRES

For the best implementation of the Fire Isolator concept one should use products from the following range of accessories:



#### FIRE AXE HIGH VOLTAGE

The Fireman's Axe High Voltage is designed and tested according to FSS code. Material: Steel blade and fiber glass handle Insulation: up to 2kV / 12 kV DC voltage



#### SAFETY WINDOW HAMMER

Break the Car Window easily with the extremely hard double-head hammer made of high-carbon steel. Also with a seat belt cutter at the bottom of the handle.



### **GRP (Fiberglass) Reinforced Plastic Storage box**

Storage boxes for both onshore and offshore applications which include lifejackets, emergency equipment or tool sets. Other storage boxes available on request.



# COMPLETE FIRE ISOLATOR KIT

The complete kit consist of: Fire Isolator Blanket, 2 aerosol units in a case, water mist lance, fire axe, safety window hammer and instruction poster.



# FIRE ISOLATOR THERMAL CAMERA

A thermal imaging camera is a type of the thermographic camera used in fire-fighting. By rendering infrared radiation as visible light, these cameras allow firefighters to see areas of heat through smoke, darkness, or heat-permeable barriers. In the context of the Fire Isolator concept, it is important to monitor the temperature under the fire blanket to see if more aerosol units need to be deployed.

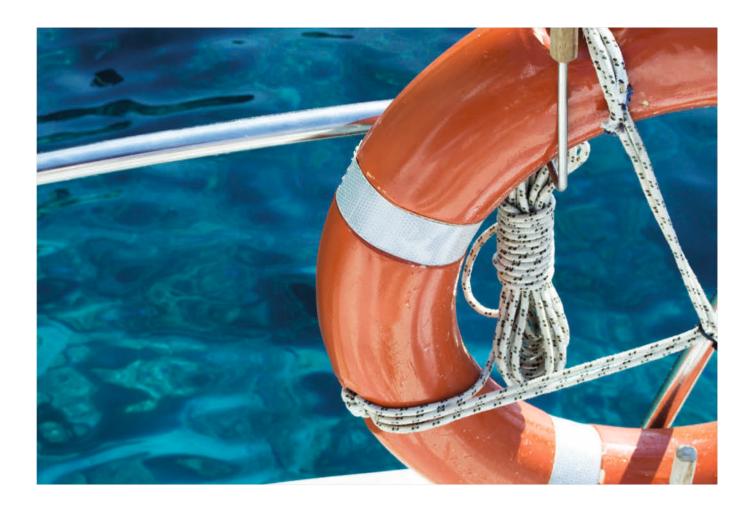




### INTRODUCTION

As one of the world's leading manufacturers and suppliers of maritime safety tapes, also called SOLAS tapes, we can offer you a wide variety of high quality tapes that are used globally to prevent incidents, protect equipment or personnel, mark or stick to objects. As a ship supplier, shipowner or lifesaving product manufacturer, we offer you the highest quality tapes required and approved by the Maritime and Offshore industry. You can be sure to find the right size, quality and design of Retro-Reflective tapes, Pipe marking tapes, Spray Stop tapes and many other types of tapes.

If you are unsure which of our tape to use for your particular situation, then please refer to our Maritime Tapes Buyer's Guide. In this document we explain and compare each tape to make sure you are using the right tape in each situation. You can read or download this Buyer's Guide on our website under "Downloads".





# **SPRAY STOP ANTI-SPLASHING TAPE**









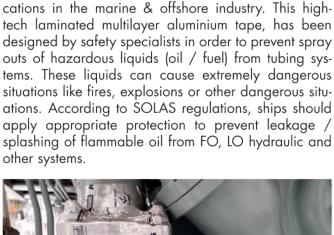


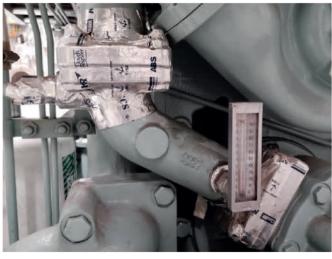














#### **Technical data**

15 bar Maximum pressure:

Maximum temperature: +160 °C continuously

+200 °C shortly

Adh. material tolerance: - 70 °C up to 200 °C Adhesion: 1000 g / 25 mm

Shelf life: 3 years

Note; other widths available on request

### **Approvals**

 Bureau Veritas, Lloyd's Register, DNV, RINA, ClassNK, ABS, KR, CCS

#### **Standards**

• Complies with the IMO A653 (16)

Article number	Description	Dimensions	Weight	IMPA
SPST0035	Spray Stop Tape	35 mm x 10 m	0,13 kg	871801
SPST0050	Spray Stop Tape	50 mm x 10 m	0,19 kg	871802
SPST0075	Spray Stop Tape	75 mm x 10 m	0,28 kg	871808
SPST0100	Spray Stop Tape	100 mm x 10 m	0,38 kg	871804
SPST0140	Spray Stop Tape	140 mm x 10 m	0,53 kg	871803
SPST0250	Spray Stop Tape	250 mm x 10 m	0,94 kg	871807
SPST0500	Spray Stop Tape	500 mm x 10 m	1,88 kg	871805
SPST1000	Spray Stop Tape	1000 mm x 10 m	3,75 kg	871806



# SPRAY STOP ANTI-SPLASHING TAPE 50+ CCS ClassNK









#### **General description**

T-ISS Spray Stop Anti-Splashing Tape 50+ has a slight difference compared to the regular version. Standard Spray Stop Tape will hold pressure up to 15 bar. Spray Stop Anti-Splashing Tape 50+ extends this limit to 50 bar. This means the tape will be particularly suitable for tubing systems that transport liquids under high pressure. Of course this tape can be used under the same circumstances as our standard Spray Stop Anti-Splashing tape.



Maximum pressure: 50 bar

Maximum temperature: +160 °C continuously

+200 °C shortly

- 70 °C up to 200 °C Adh. material tolerance: 1000 g / 25 mm Adhesion:

Shelf life: 3 years





Note; other widths available on request

#### **Approvals**

 Bureau Veritas, Lloyd's Register, DNV, RINA, ClassNK, ABS, KR, CCS

#### **Standards**

• Complies with the IMO A653 (16)

Article number	Description	Dimensions	Weight	IMPA
SPST50035	Spray Stop Tape 50+	35 mm x 10 m	0,19 kg	871801
SPST50050	Spray Stop Tape 50+	50 mm x 10 m	0,27 kg	871802
SPST50075	Spray Stop Tape 50+	75 mm x 10 m	0,40 kg	871808
SPST50100	Spray Stop Tape 50+	100 mm x 10 m	0,54 kg	871804
SPST50140	Spray Stop Tape 50+	140 mm x 10 m	0,76 kg	871803
SPST50250	Spray Stop Tape 50+	250 mm x 10 m	1,35 kg	871807
SPST50500	Spray Stop Tape 50+	500 mm x 10 m	2,70 kg	871805
SPST51000	Spray Stop Tape 50+	1000 mm x 10 m	5,40 kg	871806



# **SPRAY CONTROL TAPE**

#### **General description**

T-ISS Spray Control Tape is used to upgrade the safety in your pipeline systems. The protection tape makes surroundings a lot safer. Spray Control is made to prevent damages towards human, machinery and pipes by applying the tapes on flanges & valves at chemical plants. The pre-leak detection would help to save unnecessary expenditure for maintenance and repairing. Compared to Spray Shields & Flange Guards, the product can be directly used without any trial chore.

#### **Technical data**

Max. temperature resistance:  $-30 \, ^{\circ}\text{C}$  up to 75  $^{\circ}\text{C}$  Up to 35 bar

Material: Multilayer reinforced high grade vinyl







Article number	Description	Dimensions	Weight	Thickness
SPCT0050	Spray Control Tape	50 mm x 10 m	0,3 kg	1 mm
SPCT0100	Spray Control Tape	100 mm x 10 m	0,5 kg	1 mm
SPCT0150	Spray Control Tape	150 mm x 10 m	0,8 kg	1 mm
SPCT0300	Spray Control Tape	300 mm x 10 m	1,5 kg	1 mm



# **DRIP STOP TAPE - NONE LEAK TAPE**

#### **General description**

T-ISS Drip Stop Tape is easy to use, not using any adhesive components and it will not stick to the hand. The tape is made to stick on components. When applying it needs an overlap of half the width on the tape. The full cure time is approximately 20 - 30 minutes.

Drip Stop Tape can be used even on wet surfaces and pressurized leaking piping up to maximum 3 kg/cm<sup>2</sup>. It will even work under water. When being used in wet areas, it must be winded very tightly. The tape can also be used as a protection layer to prevent corrosion or as electric insulation.

#### **Technical data**

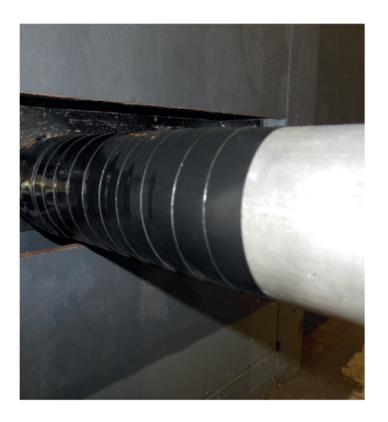
Tensile strength: 32,8 kg / cm<sup>2</sup>

Elongation at brake: 435%

Volume resistivity:  $6,1 \times 10,150$ Dielectric strength: 21 kV / mm

Dielectric constant: 0,03 Dissipation factor: 2,01







Article number	Description	Dimensions	Weight	Thickness	IMPA
DST025	Drip Stop Tape	25 mm x 10 m	0,1 kg	0,1 mm	812491
DST038	Drip Stop Tape	38 mm x 10 m	0,2 kg	0,1 mm	812492
DST050	Drip Stop Tape	50 mm x 10 m	0,3 kg	0,1 mm	812493



# PIPE REPAIR TAPE

**♦WRAS** 

#### **General description**

T-ISS Pipe Repair Tape is a specially developed resin coated glass fiber cloth, which will set also under water. The fiberglass cloth tape is impregnated with a water activated resin prior to packaging. Normal setting time is approximately 20 minutes, depending on the temperature. The activator is normal salt or fresh water. This repair product sets even under water and because of this, it is ideal to use in difficult / wet applications. T-ISS Pipe Repair Tape can be used for corrosion prevention, reinforcement and electrical protection up to 16,000 volts.

#### **Technical data**

Maximum pressure: 10 bar Maximum temperature: 150 °C

One pack of T-ISS Pipe Repair Tape comes with:

- Pipe Repair pouch
- Pipe Repair FastSteel putty
- One pair of protective gloves
- Instruction manual









#### Certificate

Water Regulations Advisory Scheme (WRAS)

Article number	Description	Dimensions	Weight	IMPA
PRTOO2	Pipe Repair Tape 2"	50 mm x 1,5 m	0,1 kg	812364
PRTOO3	Pipe Repair Tape 3"	75 mm x 2,7 m	0,2 kg	812365
PRTO04	Pipe Repair Tape 4"	100 mm x 3,05 m	0,4 kg	812363





# SOLASFLEX RETRO REFLECTIVE TAPE









TYPE II Approved A658(16). Highly weather resistant for continious outdoor exposure.

#### **General description**

T-ISS SolasFlex Refro Reflective Tape is used for the reflection of SOLAS life saving appliances such as life jackets, life rafts or life boats. Our SolasFlex Retro Reflective Tape is an encapsulated lens sheet provided with a flexible and fully transparent plastic foil. The tape is specially designed for the marine / offshore industry, has a long life span, high clarity and antielamination. All our reflective tapes consist of an encapsulated optical design with a high reflective value that is clearly visible from every angle, both in dry and wet conditions.

Our SolasFlex Retro Reflective Tape is type II approved according IMO A658(16), this means it can be used indoor as well as outdoor and is suitable for all applications, extreme weather conditions and continuous outdoor exposure.

By applying SolasFlex Retro Reflective Tape the life saving appliances will be highly visible, when for example helicopter lights are used to search for these objects.



#### The tape is available as self-adhesive and stitchable.











#### **Technical data**

Thickness: 0,1 mm

#### **Benefits & Features**

- Three different colors
- Tape reflects a clear bright white light
- High reflectivity over a wide range of entrance angles
- Type 2 Solasgrade reflectivity (indoor/outdoor use)
- Other widths available on request

#### **Approvals**

 USCG, DNV, Wheelmark, Russian Register, Korean Register

#### **Standards**

 Complies with IMO Res. A658(16) and meets USCG specification 46 CFR Part 164. **Important warning:** reflective tape with a type I approval can only be used on indoor stored lifejackets and life rafts, this is not suitable for lifebuoys, lifeboats and other lifesaving equipment which are exposed to the environment.



Article number	Description	Dimensions	Weight	IMPA	ISSA
SRTA0050	SolasFlex Retro Reflective Tape Adhesive	50 mm x 45,7 m	1,2 kg	330189	4700704
SRTA1220	SolasFlex Retro Reflective Tape Adhesive	1220 mm x 45,7 m	35,7 kg		-
SRTS0050	SolasFlex Retro Reflective Tape Stitchable	50 mm x 45,7 m	1,0 kg	*	+
SRTS1220	SolasFlex Retro Reflective Tape Stitchable	1220 mm x 45,7 m	27,7 kg	4	2

#### MARINE REFLECTIVE TAPE

#### **General description**

T-ISS high-quality self-adhesive Marine Reflective Tape meets several requirements, such as impact resistance and UV protection. The tape is made up of several layers of minuscule prisms which reflect the light perfectly and can be applied to various materials such as steel, plastic, aluminium, fibreglass, etc.



Article number	Description	Color	Dimensions	Weight
MRTA-050-RD	Marine Retro Reflective Tape adhesive	Red	50 mm x 50 m	1,3 kg
MRTA-050-YE	Marine Retro Reflective Tape adhesive	Yellow	50 mm x 50 m	1,3 kg



# SAFETY MARKING TAPE REFLECTIVE

#### **General description**

T-ISS Safety Marking Tape Reflective is an engineering grade reflective tape, used to provide safety and protection. Used to highlight hazards, it is over 200 times more reflective than white paint. Suitable for highlighting hazards and danger areas. Gives a 24/7 protection in and on your vessel.

#### **Technical data**

Material: PVC Adhesive side: Single sided

Purpose: Warning and marking



#### Left rotated Right rotated

#### **Benefits & Features**

- High visibility
- Providing optimal safety to prevent hazardous situations and accidents



Article number	Description	Color	Dimensions	Weight	IMPA
SMTR050R-R	Safety Marking Tape Reflective right	Red/white	50 mm x 10 m	0,3 kg	-
SMTR050R-L	Safety Marking Tape Reflective left	Red/white	50 mm x 10 m	0,3 kg	~
SMTR100R-R	Safety Marking Tape Reflective right	Red/white	100 mm x 10 m	0,6 kg	-
SMTR100R-L	Safety Marking Tape Reflective left	Red/white	100 mm x 10 m	0,6 kg	-
SMTRO50B-R	Safety Marking Tape Reflective right	Yellow/black	50 mm x 10 m	0,3 kg	331191
SMTR050B-L	Safety Marking Tape Reflective left	Yellow/black	50 mm x 10 m	0,3 kg	
SMTR100B-R	Safety Marking Tape Reflective right	Yellow/black	100 mm x 10 m	0,6 kg	331192
SMTR100B-L	Safety Marking Tape Reflective left	Yellow/black	100 mm x 10 m	0,6 kg	<u>.</u>



# **ANTI-SLIP TAPE**

#### **General description**

T-ISS Anti-Slip Tape helps to protect slippery surfaces and to prevent accidents. This tape offers safe working and walking by when applied on stairs and walkways, both indoor and outdoor. Anti-Slip Tape is a mineral coated plastic film with a pressure sensitive adhesive protected by a removable liner. The tape is made using aluminium oxide mineral particles and has a solvent acrylic adhesive material. The tape can be applied in a temperature between 5 °C and 50 °C.

#### Technical data

Thickness: 0,8 mm tape + 1 - 0,2 mm grit

Steel adhesion: 1500 g / 25 mm
Tensile strength: 6 kg / 25 mm
Elongation / break: 2596

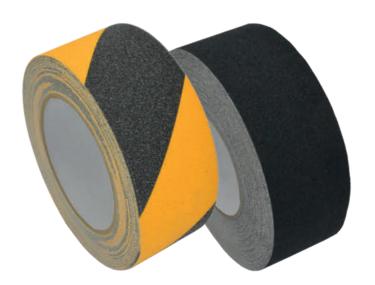
Application temp: 5 °C up to 50 °C







Article number	Description	Color	Dimensions	Weight
ASTO025BK	Anti-Slip Tape	Black	25 mm x 18 m	0,3 kg
ASTO050BK	Anti-Slip Tape	Black	50 mm x 18 m	0,6 kg
AST0100BK	Anti-Slip Tape	Black	100 mm x 18 m	1,2 kg
AST0150BK	Anti-Slip Tape	Black	150 mm x 18 m	1,8 kg
ASTO050YB	Anti-Slip Tape	Yellow/black	50 mm x 10 m	0,6 kg
AST0100YB	Anti-Slip Tape	Yellow/black	100 mm x 10 m	1,2 kg





# FLOOR MARKING TAPE

#### **General description**

T-ISS Floor Marking Tape is a tape that was designed for marking floors and walkways to highlight safety hazards. T-ISS Floor Marking Tape has an extremely high durability towards tough surroundings with its excellent adhesive quality. Marking dangerous areas with this floor tape is the first step to increase safety.

#### **Technical data**

Material: PVC

Adhesive: Natural rubber adhesive

Carrier: 0.135 mm

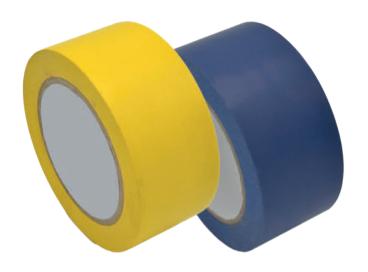
PVC Film Appl. temp: 0-50 °C

Total thickness: 0.15 mm

Temperature: 0-90 °C

Tensile strength: 25 N / cm

Elongation: 150 %











Article number	Description	Color	Dim
FLTO50BU	Floor Marking Tape	Blue	50 m
FLT050GN	Floor Marking Tape	Green	50 m
FLTO5ORD	Floor Marking Tape	Red	50 m
FLTO50YE	Floor Marking Tape	Yellow	50 m
FLTO50BK	Floor Marking Tape	Black	50 m

Color	Dimensions	Weight
Blue	50 mm x 33 m	0,3 kg
Green	50 mm x 33 m	0,3 kg
Red	50 mm x 33 m	0,3 kg
Yellow	50 mm x 33 m	0,3 kg
Black	50 mm x 33 m	0,3 kg



# BARRIER TAPE

#### **General description**

T-ISS Barrier Tape can be used for depositing, marking prohibited or dangerous places. The red/white or black/yellow barrier tape is popular because of the striking hazard colors.

#### Technical data

Material: Flexible PVC barrier tape

Length: 500 m Weight: 950 gr Adhesion: Non-adhesive Thickness: 0,03 mm

#### **Benefits & Features**

Barrier tape comes in a convenient dispenser box which allows you to obtain the tape length you need, rip off that part, and store the dispenser box in a suitable place. Ideal for tying to fencing, cones & other fixed points.











Article number	Description	Color	Dimensions
BT080RW	Barrier Tape	Red/white	80 mm × 500 m
BTO80YB	Barrier Tape	Yellow/black	80 mm x 500 m



# LIGHTLINE PHOTOLUMINESCENT TAPES





#### **General description**

T-ISS manufactures various photoluminescent tapes to indicate escape routes on cruise ships, oil tankers, ferries, roll-on/roll-off ships and many other vessel types. These tapes are being made using PVC, PU or PET materials.

The PU material tape is especially used for applications with rounded surfaces and locations where heavy duty materials are required.

All the photoluminescent tapes complies with the IMO & SOLAS regulations. They have a strong adhesive layer which ensures an extremely good adhesion on many different substrates. The tapes are specially designed for mounting on board of ships and have excellent aging and weather resistant properties. Because of these properties the tapes are suitable for both indoor and outdoor applications/usage. The photoluminescent tapes are not only applicable in the maritime and offshore sector but also in the installation business, such as office buildings and hallways.



#### **Technical data**

Elongation 24%

Weight: 300 g - 40 mm, 375 g - 50 mm, 600 g - 80 mm

Thickness: 0,175 mm
Tensile strength: Approx. 5 kg

Luminance intensity (mcd / m²)	10 min	60 min
Class XXL	200	30
Class XL	100	10



### **Approvals**

- Wheelmark
- DNV

#### **Standards**

 The product complies with IMO A752(18) and ISO 15370 which include ships and marine technology / low location lighting on passenger ships arrangements.

#### T-ISS LightLine Tape PET

Other widths available on request

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTP040CN	LightLine Tape PET neutral	40 mm x 10 m	XXL	1.5	-
LLTP050CN	LightLine Tape PET neutral	50 mm x 10 m	XXL	) <b>-</b>	-:
LLTP080CN	LightLine Tape PET neutral	80 mm x 10 m	XXL	-	-







# T-ISS LightLine tape PVC

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CN	LightLine Tape PVC neutral	40mm x 10mtr	XXL	332014	4752014
LLTV050CN	LightLine Tape PVC neutral	50mm x 10mtr	XXL	-	-
LLTV080CN	LightLine Tape PVC neutral	80mm x 10mtr	XXL	332018	~
LLTV040BN	LightLine Tape PVC neutral	40mm x 10mtr	XL	332014	4752014
LLTV050BN	LightLine Tape PVC neutral	50mm x 10mtr	XL	o∰と	-
LLTV080BN	LightLine Tape PVC neutral	80mm x 10mtr	XL	332018	ω;



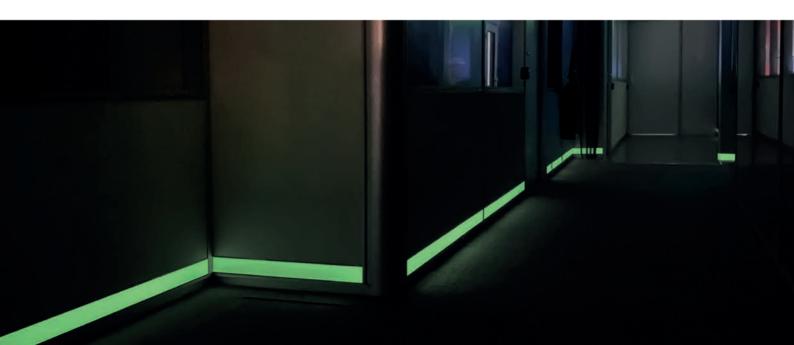
According ISO 15370; Only dead-end corridors

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CA	LightLine Tape PVC arrow	40mm x 10mtr	XXL	ž.	•1
LLTV080CA	LightLine Tape PVC arrow	80mm x 10mtr	XXL	-	*:
LLTV040BA	LightLine Tape PVC arrow	40mm x 10mtr	XL	-	4
LLTV080BA	LightLine Tape PVC arrow	80mm x 10mtr	XL		3



According ISO15370; Please note; this tape is delivered with 3x ES1032, 3x ES1033, 3x ES1004, 3x ES1005 stickers. Other symbols upon request.

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CE	LightLine Tape PVC escape direction	40mm x 10mtr	XXL	332024	4752024
LLTV050CE	LightLine Tape PVC escape direction	50mm x 10mtr	XXL	*	*)
LLTV080CE	LightLine Tape PVC escape direction	80mm x 10mtr	XXL	332028	<b>*</b> (
LLTVO40BE	LightLine Tape PVC escape direction	40mm x 10mtr	XL	332024	4752024
LLTV050BE	LightLine Tape PVC escape direction	50mm x 10mtr	XL	*	•
LLTV080BE	LightLine Tape PVC escape direction	80mm x 10mtr	XL	332028	**





# SAFETY MARKING TAPE PHOTOLUMINESCENT

#### **General description**

T-ISS Safety Marking Tape Photoluminescent is used to show contours in spaces. The outlines of (emergency) exits, obstacles and areas to be kept clear or for example, fire extinguishers can be marked with luminous Safety Marking Tapes.

The Safety Marking Tapes Photolimuniescent complies with the IMO & SOLAS regulations, have a strong adhesive layer and are suitable for both indoor and outdoor applications/usage.

#### Technical data

Elongation 24%

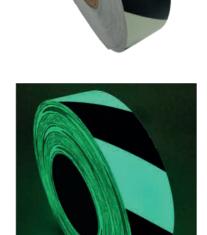
Weight: 300 g - 40 mm / 600 g - 80 mm

Thickness: 0,175 mm
Tensile strength: Approx. 5 kg

Luminance intensity (mcd / m²)	10 min	60 min
Class XXL	200	30
Class L	50	7

#### **Standards**

 The product complies with IMO A752(18) and ISO 15370 which include ships and marine technology / low location lighting on passenger ships arrangements.



Other widths available on request

Article number	Description	Dimensions	Quality	IMPA	ISSA
SMTV040CG	Safety Marking Tape PVC green	40 mm x 10 m	XXL	332034	4752034
SMTV080CG	Safety Marking Tape PVC green	80 mm x 10 m	XXL	332038	
SMTV040AG	Safety Marking Tape PVC green	40 mm x 10 m	L	332034	4752034
SMTV080AG	Safety Marking Tape PVC green	80 mm x 10 m	L	332038	<del>(*</del> )

Other widths available on request

Article number	Description	Dimensions	Quality	IMPA	ISSA
SMTV040CR	Safety Marking Tape PVC red	40 mm x 10 m	XXL	332054	4752054
SMTV080CR	Safety Marking Tape PVC red	80 mm x 10 m	XXL	332058	8
SMTV040AR	Safety Marking Tape PVC red	40 mm x 10 m	L	332054	4752054
SMTV080AR	Safety Marking Tape PVC red	80 mm x 10 m	L	332058	4

Other widths available on request

Article number	Description	Dimensions	Quality	IMPA	ISSA
SMTV040CB	Safety Marking Tape PVC Black	40 mm x 10 m	XXL	332044	4752044
SMTV080CB	Safety Marking Tape PVC Black	80 mm x 10 m	XXL	332048	( <del>*</del> )
SMTV040AB	Safety Marking Tape PVC Black	40 mm x 10 m	L	332044	4752044
SMTV080AB	Safety Marking Tape PVC Black	80 mm x 10 m	L	332048	-



# SECURITY SEAL TAPE

#### **General description**

T-ISS offers various layouts of reliable Security Seal Tapes, also called warranty void labels. These are made of tamper evident destructible PET. When using this Security Seal Tape, you can quickly see if your goods have been tampered with. It shows the "OPEN VOID" hidden security message as soon as the warranty tape is removed from the surface of a carton box of other applications. These SecuSeal Tapes seal of and provide extra protection.

Our Security Seal Tape can be applied to a large range of surfaces including paper, card, metal, glass and many more. Void tapes are mainly used for forensic intelligence investigation, military, banking security, aviation security, medical packaging seals, electronic goods protection and other.

#### **Technical data**

Adhesion: Pressure sensitive

Minimum Shelf life: 2 years Thickness: 25 Micron

Color: Various colour's, layouts and sizes are possible

according to the customers demands. Production

of individual labels or on roll. Also custom made labels possible. PET, Halogen free, NON-PVC



#### **Benefits & Features**

Material:

Security Seal Tapes help you to reveal tampering or unauthorized access. High value goods need to have a security/safety seal. This seal protects the luxury goods from theft and fraud during shipment and storage. Our Security Seal Tapes reveal the hidden security message when tampering has occurred. Even if someone tries to replace it, the void tape will show that an individual attempted to break into it.





SECURITY SEAL - - - - - VOID IF BROKEN
Secured by \_\_\_\_\_\_ on \_\_\_\_

Security Seal Tape (open void tape) provides the best solution when evidence is required of tampering. Our guarantee seal or guarantee tape provide a visible indication of attempt of removal. After removing, since most of adhesive remains on the surface (and little to none on the tape film), the tape film cannot be reused, which is an added security feature against unauthorized reuse of the tape.

Article number	Description	Dimensions	Weight	Thickness
SST035DNB	Security Seal Tape - Do not break	35 mm x 10 m	73 gr	25 mu
SST035VIB	Security Seal Tape - Void if broken	35 mm x 10 m	73 gr	25 mu
SST035CM	Security Seal Tape (custom-made)	35 mm x 10 m	73 gr	25 mu

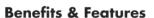


# **BIOSOLUBLE HEAT STOP TAPE**

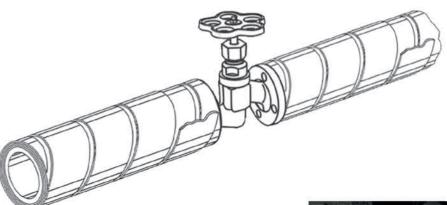
#### **General description**

T-ISS Biosoluble Heat Stop Tape is a revolutionary new environmental friendly tape and is used for insulation of hot piping systems on board ships. It was specially invented to replace the ceramic fiber tape in the maritime sectors. T-ISS Biosoluble Heat Stop Tape is made of a biosoluble fiber chemical composition which is different from regular ceramic fiber, the biosoluble fiber has a better performance and it is biodegradable. It protects surfaces and lowers temperatures in a highly effective way.

T-ISS Biosoluble Heat Stop Tape is a woven fabric made of superior biosoluble fiber. This special tape contains about 15-18% binder materials which gives it superior heat resistance. Inwoven stainless steel wire and the fiberglass filament inside will keep the biosoluble fiber tape high temperature performance when it is used.



- No cracking and no hardening
- Cold and wet surface application is possible
- ECO friendly
- Temperature resistance: 1000 °C



#### **Standards**

- Meets SOLAS Regulation II/2/12.2.10
- Complies with MSC 61 (67)
- GTS Verification of Compliance
- EN 14306:2009 + A1:2013



Article number	Description	Dimensions	Weight	Thickness
HST050	Heat Stop BIO Tape	50 mm x 7,7 m	252 gr	3 mm
HST100	Heat Stop BIO Tape	100 mm x 3,3 m	609 gr	12,5 mm



# **CORROSION STOP ZINC TAPE**

#### **General description**

T-ISS Corrosion Stop Zinc Tape will prevent galvanic corrosion and protects new and existing steel parts such as bridge supports, pipelines and other marine structures. Corrosion Stop Zinc Tape is made of a high purity zinc with a high tack self-adhesive backing.

T-ISS Corrosion Stop Zinc Tape has a sacrificing role in the oxidation process. Instead of the two metals that are attached to each other, the tape will oxidize and so protect the two other metals. The same principle is put into practice on vessels; anodes are placed on the ship's hull. These anodes will rust instead of the hull which results in a hull that's rust-free for a longer period of time.



#### **Technical data**

Material: Zinc layer (39%)

Adhesive: Acrylate

Adhesion to steel: >70N /100 mm

Thickness: 0,1 mm zinc, 0,05 mm adhesive

Temp. resistance: up to 115 °C Shelf life: up to 12 months

#### **Benefits & Features**

The zinc layer on the tape will not be infiltrated by water, gas, etc. Also, the tape will not age due to UV light so there will be no corrosion from the inner layer.





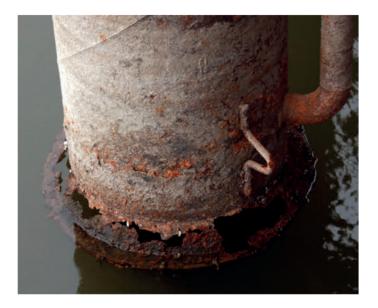
Article number	Description	Dimensions	Weight	Thickness	IMPA
CSZT025	Corrosion Stop Zinc Tape	25 mm x 20 m	429 gr	1 mm	673521
CSZT050	Corrosion Stop Zinc Tape	50 mm x 20 m	<i>77</i> 1 gr	1 mm	673522
CSZT100	Corrosion Stop Zinc Tape	100 mm x 20 m	1386 gr	1 mm	673523



# **RUST STOP PETRO TAPE**

#### **General description**

T-ISS Rust Stop Petro Tape is an anti-corrosion tape which can be applied to all types of steel and steel structures, including pipes and pipelines. The tape provides an excellent resistance to water, acids, alkalies and salts. It is an appropriate long-term solution against corrosion. Even under water, under the ground and in harsh weather conditions, the tape retains its excellent properties and won't peel, harden or crack. The tape is easy to apply and requires a very short processing time. The tape is solvent-free.









Article number	Description	Dimensions	Weight	Thickness	IMPA
RSPTO50	Rust Stop Petro Tape (36 pcs)	50 mm x 10 m	0,7 kg	1,2 mm	812471
RSPT100	Rust Stop Petro Tape (18 pcs)	100 mm x 10 m	1,4 kg	1,2 mm	812472



# **HATCH COVER BLUELINER TAPE**

#### **General description**

Extreme weather conditions can cause leakage of your hatch covers, which can lead to damage of the cargo being transported. T-ISS Hatch Cover Blueliner Tape keeps moisture out and ensures a tight seal that's weather and smoke resistant. The tape has an extraordinary strength, great adhesion and is extremely flexible. The tape is easily recognizable by the blue top layer of modified PE material. This material gives the highest protection under extreme conditions.

#### **Technical data**

Characteristic: 20 m / self-adhesive SBS bitumenrubber coated

Heat resistance: -15 °C up to 40 °C

Shelf life: 5 years





#### **Benefits & Features**

Hatch Cover Blueliner Tape is tested under practical environments and extreme weather conditions. The tape can be installed between 5 °C and 40 °C, and can withstand -15 to 70 °C. Rolls are 20 meter of self-adhesive SBS bitumen rubber compound, coated to a modified blue PE liner and with a release PE Liner.



Article number	Description	Dimensions	Weight	Thickness	IMPA
HCT100	Hatch Cover Tape (3 pcs)	100 mm x 20 m	4,5 kg	2 mm	232452
HCT150	Hatch Cover Tape (2 pcs)	150 mm x 20 m	7,0 kg	2 mm	232453



# **FOAM MOUNTING TAPE**

#### **General description**

T-ISS Foam Mounting Tapes are closed-cell, polyethylene foam, coated with a high tack / high shear acrylic adhesive. It has superior chemical and fuel resistance, and good outdoor weather resistance. It has excellent adhesive performance in the area of tack, sheer and adhesion.

High tack permanent adhesive with excellent aging and weather resistant properties specifically designed for mounting and joining nameplates, plastic trim, signs and emblems. Used on board of all types of vessels to install signage or to fix products to a surface.



Peel adhesion: PSTC-3.1.8 kg / 25 mm Shear strength: PSTC-7 over 72 hours

Heat resistance: Over 24 hours Service temperature: -30 °C ~ 120 °C Strength: 1.8 kg/25 mm





Other widths available on request in 10 and 50 m length

Article number	Description	Dimensions	Weight	Thickness
FMT10-020	Foam Mounting Tape	20 mm x 10 m	0,07 kg	1 mm
FMT10-040	Foam Mounting Tape	40 mm x 10 m	0,10 kg	1 mm
FMT10-050	Foam Mounting Tape	50 mm x 10 m	0,12 kg	1 mm
FMT50-150	Foam Mounting Tape	150 mm x 50 m	1,80 kg	1 mm







# INTRODUCTION

We are proud to offer the complete range of all components for the full execution of safety signage systems. For those who are responsible for the health and safety of people, independent for workers, crew, passengers or other public, implementing of an effective safety signage system is a strategic and operational decision.

An appropriate implementation reduce risks across language barriers by using worldwide standardized symbols in a systematic way.



We offer all types of signs both electrical illuminated, certified photoluminescent, retroreflective and other qualities inclusive a full range of installation accessories.

Development of the safety signage system is 'craftmanship'. T-ISS offer the full service for engineering and advice and can also provide the complete installation.





# **ELECTRICAL ESCAPE SIGNS**

We offer a selected range of electrical escape signs for installation in an escape route signage system. Electrical escape signs are used to show personnel and guests where to go in the event of a fire or other emergency. Electrical escape signs are an essential part of an effective escape route signage system to create a coherent whole of Low location lighting, including escape signs, signs applied at eye level, signage indicating how to reach the assembly station(s) and instructions for guests and staff in the cabins and common areas.

#### Why choose led escape signs

Visibility, brightness and long life are the key factors when purchasing illuminated escape signs. Light emitting diode or LED escape signs have proven to be successful in reducing electricity consumption up to 85%. LED escape signs can save money and power while emitting considerable amounts of light. Because LED lights don't have a wire to burn out, they also have a much longer lifespan, making them more cost-efficient. A led escape sign is very bright and visible and can be seen even through some smoke.



A lot can happen in an emergency situation, including a loss of wired electrical power. Naturally, finding the way to safety (eg an embarkation station on a ship) in these situations are critical, which is why some of our led escape signs are offered with battery backups. If electricity cuts out, the sign automatically begins drawing from its installed batteries to provide uninterrupted illumination.







# MARITIME SAFESIGN LED ESCAPE SIGN



#### **General description**

Our 'Dutch Design' premium quality range of LED Escape signs are designed to clearly identify escape routes, executed in a timeless design that fits in with contemporary naval architecture. Our range of LED Escape signs allow for easy installation and provide a reliable and stylish solution for use onboard cruise ships, ferries, offshore installations and commercial ships.

The LED Escape signs are IP44 protected, CE approved and are available in two formats, recessed and surface mounted, offering 'fit and forget' LED technology providing a long lifespan of at least 40.000 hours.



Surface installation model



#### Electrical and photoluminescent in one: the best of both worlds

As a result of an innovation that comes from our many years of experience in supplying various markets with photoluminescent signs and Low Location Lighting, we have combined two techniques in our SafeSign LED Escape signs; the main power source is electricity, but when the power is lost as a result of a calamity, the photoluminescent capabilities of the sign take over, providing the users with a very clear sign to the exit.



Normally powered



After power loss (1 hour, 119 mcd/m²)



After power loss (10 minutes, 857 mcd/m²)



After power loss (3 hours, 22 mcd/m²)



#### **Examples safety sign layouts**

See "Escape Route signs" page 84 to 93 for all layouts.



#### **Technical data**

Input voltage: AC 90~240V 50~60HZ

Power: 4W

Lifespan: +40.000hrs
Viewing distance: > 24 m
Class: CE approved

Protection: IP44

Material: Flame retardant ABS plastic Exchangeable signs upon request

Frame color: RAL 9022

Optional: Other frame colours available upon request for larger orders

#### How to order:

When ordering this LED escape sign, please use the following notation for the fixture type in conjunction with your desired safety sign: <article number> + <sign number>. For example: LX070RLD + ES5134.

#### **Approval**

- CE approved
- RINA

Article number	Description	Туре	Dimensions	Weight
LXO7ORLS	LED Escape sign recessed installation	LED single sided	430 x 125 x 114 mm	1300 g
LXO7ORLD	Insert height 70 mm	LED double sided	430 x 125 x 114 mm	1200 g
LXO7ORPS		LED photoluminescent single sided	$430 \times 125 \times 114 \text{ mm}$	1300 g
LXO7ORPD	\$ 1	LED photoluminescent double sided	$430\times125\times114~\text{mm}$	1200 g
LX070SLS	LED Escape sign surface installation	LED single sided	$430 \times 125 \times 114 \text{ mm}$	1500 g
LX070SLD	Insert height 70 mm	LED double sided	430 x 125 x 114 mm	1400 g
LX070SPS	S 1	LED photoluminescent single sided	430 x 125 x 114 mm	1500 g
LX070SPD	2) T	LED photoluminescent double sided	$430\times125\times114~\text{mm}$	1400 g



# **EXPLOSION PROOF LED LARGE ESCAPE SIGN**



#### **General description**

The Explosion Proof LED Large Escape Sign is designed to operate in hostile environments. Constructed from corrosion resistant materials, this Escape light sign can be used in indoor and outdoor areas that are subject to water spray or moisture. This Escape Sign fixture was designed to function in areas where flammable gases or vapors and/or combustible dust exist. In these types of environments, a normal fixture could accidentally ignite an explosive reaction. As a result, the DAESUVE GH01 is the ideal Escape Sign in engine rooms of LNG-powered vessels.

#### **Technical data**

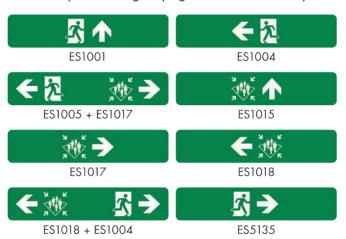
Capacity: 25 W Materials:

Body: Glassfiber Reinforced Polyester

• Globe: Clear polycarbonate Protection degree: IP66 / IP67

#### **Examples safety sign layouts**

See "Escape Route signs" page 84 to 93 for all layouts.









#### How to order:

When ordering this LED escape sign, please use the following notation for the fixture type in conjunction with your desired safety sign: <article number> + <sign number>. For example: LXP200S + ES5135.

#### Approval

Wheelmark

#### Standard

EU-type examination certificate by KR Hellas

Article number	Description	Dimensions	Weight
LXP200S	EX Proof LED Large Escape Sign	745 x 213 x 147 mm	6,5 kg



# LOW LOCATION LIGHTING







# LOW LOCATION LIGHTING SYSTEM

When the light suddenly goes out or the room is heavily darkened, e.g. due to smoke development, photoluminescent materials offer the perfect solution. Routes to the exits, obstacles, emergency exits, stairs and safety equipment should be marked with Low Location Lighting. Our glowing tapes, strips and LED systems are often used to create an escape route guidance system according to IMO, SOLAS and ISO regulations. T-ISS also realizes on a project basis the implementation of Low Location Lighting systems, measurements and certifications.



#### **Innovations**

In 2009 T-ISS started an innovative project with the objective to improve the quality and environmental footprint of photoluminescent signs and Low Location Lighting tapes and strips. Today most sign makers use PVC, despite the fact that PVC is the single most environmentally damaging of all plastics. PVC contains halogens and their toxicity of smoke is of highest concern within enclosed spaces, which you will find on-board any ship or platform.

#### **PET-X** instead of PVC

During our innovation project we managed to replace PVC with a safe material, a modified recyclable polymer called PET-X, which is free of halogens. Besides this new material the innovation went on, and we managed to innovate our printing process in such a way that the expected life is up to 5 times longer than the market average. The last upside is the visual appearance, SafeSign signs and Low Location Lighting strips have a high quality glossy finish, which is easy to clean. The use of these new materials and techniques helped us to achieve innovative product which is also more economical and looks better.



# **RULES AND REGULATIONS**

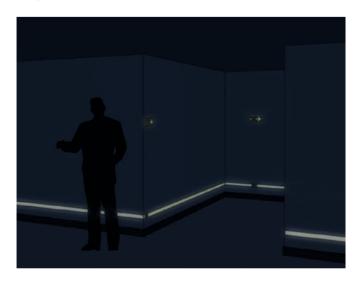
The below rules, regulations and standards describe the technical performance and properties of the products used, how to install these products/systems and how to certify and maintain these products/systems.

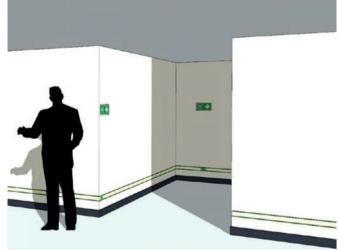
Standard	Description
IMO Resolution A.752 (18)	Guidelines for the evaluation, testing and application of LLL on passenger ships
SOLAS Convention 2004	Means of escape - Marking of escape routes
European Directive 2002/25/EC	Safety rules and standards for passenger ships
ISO 15370:2021	Low Location Lighting (LLL) on passenger ships
ISO 16069	SWGS - Safety Way Guidance Systems
ISO 24409-2:2014	Ships and marine technology Design, location and use of shipboard safety signs, fire control plan signs, safety notices and safety markings
ISO 17398:2004	Safety colours and safety signs - Classification, performance & durability of safety signs

#### Requirements

T-ISS is a specialist for Low Location Lighting systems on Cruise Liners & Ferries. IMO & Solas regulations require that ships carrying more than 36 passengers shall be fitted with Low Location Lighting. Resolution A.752(18) & ISO15370 details system requirements and testing procedures:

- The installed material must be Class/Wheelmark approved
- All escape routes, including stairs, must be marked by Low Location Lighting
- Where stairs or corridors are more than 2m wide, Low Location Lighting should be mounted on both sides
- 'Escape' signs should be provided at each exit, located on the same side as the door handle
- Fire and watertight doors should be marked to show how the door opens
- LLL lighting must be placed maximum 30cm above the deck at all points of the escape route
- Systems must have their luminescence tested at least once every 5 years







#### **Luminance properties**

The rules, regulations and standards classify the luminescence of signage and low location light systems as per below table, SafeSign products meet or exceed the required luminance.

Applicable Standards and Resolutions vs. SafeSigns	Luminescent int (mcd/m²) (Afte the existing ligh	r removing
	10 minutes	60 minutes
IMO Res. A. 752(18)	15 mcd/m <sup>2</sup>	$2 \text{ mcd/m}^2$
ISO 15370	15 mcd/m <sup>2</sup>	2 mcd/m <sup>2</sup>
DIN 67 510-4	23 mcd/m <sup>2</sup>	$3 \text{ mcd/m}^2$
ISO 17398 Class A	25 mcd/m <sup>2</sup>	$3 \text{ mcd/m}^2$
ISO 17398 Class B	50 mcd/m <sup>2</sup>	$7 \text{ mcd/m}^2$
ISO 17398 Class C	140 mcd/m <sup>2</sup>	$20 \text{ mcd/m}^2$
ISO 17398 Class D	260 mcd/m <sup>2</sup>	$35 \text{ mcd/m}^2$
ISO 17398 Class E	400 mcd/m <sup>2</sup>	$55 \text{ mcd/m}^2$
ISO 17398 Class F	520 mcd/m <sup>2</sup>	$70 \text{ mcd/m}^2$
SafeSign XL	Class B+	Class B+
SafeSign XXL	Class C+	Class C+
SafeSign XXX	Class E+	Class E+

The mentioned value's according to IMO Res. A 752(18) in above table are applicable when the width of the photo luminescent LLL is 75 mm. For all other heights, the values need to be re-calculated as specified in IS015370:2021 Annex D. Below table show the minimum requirement for different widths.

Height of LLL system in mm	Luminescent intensity (mcd/m²) (After removing the existing light)				
	10 minutes	60 minutes			
75 mm	15,0 mcd/m <sup>2</sup>	2,0 mcd/m <sup>2</sup>			
65 mm	23,4 mcd/m <sup>2</sup>	3,1 mcd/m <sup>2</sup>			
50 mm	$33,8 \text{ mcd/m}^2$	4,5 mcd/m <sup>2</sup>			
40 mm	$52,7 \text{ mcd/m}^2$	7,0 mcd/m <sup>2</sup>			
30 mm	93,7 mcd/m <sup>2</sup>	12,5 mcd/m <sup>2</sup>			
25 mm	$135,0 \text{ mcd/m}^2$	18,0 mcd/m <sup>2</sup>			



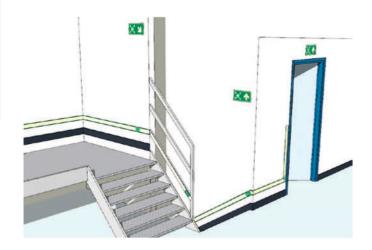
#### **Innovative New Material: PET-X**

T-ISS offers as the only manufacturer in the market SafeSign PET-X LLL photoluminescent strips. This innovative product offers the following benefits:

- Glossy finish
- PVC Free
- Halogen Free
- Easy to wipe clean
- UV resistant
- Recyclable
- No end caps needed
- 10 year warranty
- >10 years life durability
- No shrinking
- 50% timesaving on installation
- Self-adhesive backing
- Salt Water resistant

Benefits compared to aluminium profile systems:

- No lost or loose end caps
- No gaps due to shrinking
- No more dirt collections on profile
- No mechanical damages
- No more dirt on insert which cannot be removed





# LIGHTLINE PET-X STRIPS



The LightLine LLL System is the easiest and most cost effective Low Location Lighting system to install, requiring only the application of the LLL strips where needed. Cutting on required lengths can be done easily with a knife. The system is finalized by positioning the LLL signs/stickers at the right places. When you choose to install our LightLine system, time savings up to 200% can be achieved.

LightLine Pet-X photoluminescent strips are Non PVC/ Halogen-free plastic strips with backlighting material and a strong self-adhesive foam tape on the back. The material has a 'glossy' finish which is easy to clean and gives it a high quality appearance. The LightLine strips are available with or without 5mm safety green edges at the top and bottom of the strips.



LightLine strips have a standard length of 1 m, 50 mm height and are produced with the high luminescence class XXL. All strips have a self-adhesive backing for easy fixing during new builds or refurbishment projects. LightLine strips are besides Non PVC/halogen-free, flame retardant and therefore exceeding all current requirements. Upon request we can manufacture LightLine strips in other widths and/or with other coloured marking stripes.

#### **Approvals**

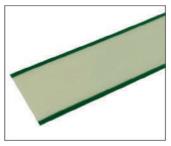
- DNV MED
- Wheelmark
- Korean Register

#### **Standards**

 Complies with IMO Resolution A. 752 (18) and ISO standard 15370



Note; The width of the photoluminescent material in the strips with the green edges is shown in parentheses, the width of the green edges is  $2 \times 5$  mm.









Article number	Description	Dimensions	Quality	Thickness
SX060CG	LightLine Strip Pet-X green edges	1 m x 60 mm (50 mm)	XXL	1,5 mm
SX070CG	LightLine Strip Pet-X green edges	1 m x 70 mm (60 mm)	XXL	1,5 mm
SX100CG	LightLine Strip Pet-X green edges	1 m x 100 mm (90 mm)	XXL	1,5 mm
SX040CN	LightLine Strip Pet-X neutral	1 m x 40 mm	XXL	1,5 mm
SX050CN	LightLine Strip Pet-X neutral	1 m x 50 mm	XXL	1,5 mm
SX070CN	LightLine Strip Pet-X neutral	1 m x 70 mm	XXL	1,5 mm



# **ALUMINIUM PROFILES AND INSERTS**





Our LightLine LLL Profile System is a system consisting of an extruded aluminium carrier and rigid photoluminescent strips. We have two different types of profiles at our range; an angled or a flat profile containing a 55,4 mm wide visible backlighting strip. The performance of the rigid panels is certified by DNV.

The flat profile is made of anodized aluminium and contains a central channel in which a strip of photoluminescent material is inserted. End caps are available to protect the ends of the profile. The angled profile is slightly angled away from the vertical to allow the photoluminescent strip to catch more light.







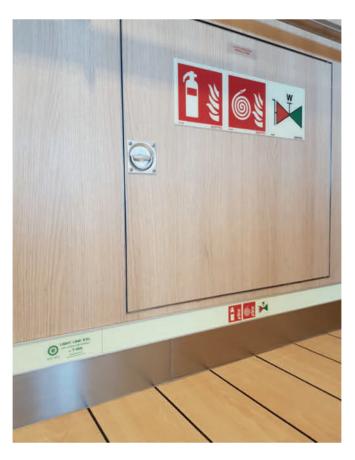


#### **Approvals**

- DNV
- Wheelmark

#### **Standards**

 Complies with IMO Resolution A. 752 (18) and ISO standard 15370



Article number	Description	Dimensions	Quality
IPA055CN	LightLine Insert PVC for angled profile	1 m x 55,4 mm	XXL
PAA60-100	Insertprofile ALU angled (insert 55,4 mm)	1 m x 60 mm	Alu. anodised
PAA60-300	Insertprofile ALU angled (insert 55,4 mm)	3 m x 60 mm	Alu. anodised
ENDCAP-AL	LLL endcap angled profile left	15 mm x 60 mm	Plastic
ENDCAP-AR	LLL endcap angled profile right	15 mm x 60 mm	Plastic
IPF056CN	LightLine Insert PVC for flat profile	1 m x 56 mm	XXL
PAF60-100	Insertprofile ALU flat (insert 56 mm)	1 m x 60 mm	Alu. anodised
PAF60-300	Insertprofile ALU flat (insert 56 mm)	3 m x 60 mm	Alu. anodised
ENDCAP-F	LLL endcap flat profile	4 mm x 53 mm	Alu. anodised



# LIGHTLINE PHOTOLUMINESCENT TAPES

#### T-ISS LightLine Tape PET

Other widths available on request

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTP040CN	LightLine Tape PET neutral	40 mm x 10 m	XXL		
LLTP050CN	LightLine Tape PET neutral	50 mm x 10 m	XXL	-	-
LLTP080CN	LightLine Tape PET neutral	80 mm x 10 m	XXL		20

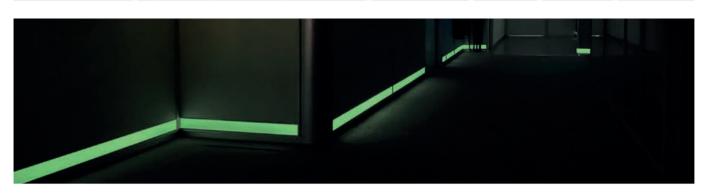
# T-ISS LightLine tape PVC

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CN	LightLine Tape PVC neutral	40mm x 10mtr		332014	4752014
LLTV050CN	LightLine Tape PVC neutral	50mm x 10mtr	XXL	E#€	
LLTV080CN	LightLine Tape PVC neutral	80mm x 10mtr	XXL	332018	-:
LLTV040BN	LightLine Tape PVC neutral	40mm x 10mtr	XL	332014	4752014
LLTV050BN	LightLine Tape PVC neutral	50mm x 10mtr	XL	.=	*
LLTV080BN	LightLine Tape PVC neutral	80mm x 10mtr	XL	332018	-

$\rightarrow$ $\rightarrow$	According ISO 15370; Only dead-end corridors				
Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CA	LightLine Tape PVC arrow	40mm x 10mtr	XXL	*	*:
LLTV080CA	LightLine Tape PVC arrow	80mm x 10mtr	XXL	*	<u> </u>
LLTVO40BA	LightLine Tape PVC arrow	40mm x 10mtr	XL	-	-
IITVO8OBA	Lightline Tane PVC arrow	80mm x 10mtr	ΧI	_	_

According ISO15370; Please note; this tape is delivered with 3x ES1032, 3x ES1033, 3x ES1004,

Article number	Description	Dimensions	Quality	IMPA	ISSA
LLTV040CE	LightLine Tape PVC escape direction	40mm x 10mtr	XXL	332024	4752024
LLTV050CE	LightLine Tape PVC escape direction	50mm x 10mtr	XXL		2
LLTV080CE	LightLine Tape PVC escape direction	80mm x 10mtr	XXL	332028	<b>.</b>
LLTVO40BE	LightLine Tape PVC escape direction	40mm x 10mtr	XL	332024	4752024
LLTV050BE	LightLine Tape PVC escape direction	50mm x 10mtr	XL	. 2	27
LLTV080BE	LightLine Tape PVC escape direction	80mm x 10mtr	XL	332028	





# **LOW LOCATION LIGHTING MINI SYMBOLS**

According ISO 15370 and SOLAS Low Location Lighting system shall be provided with symbols for escape route and fire-fighting equipment, in addition to the signs present at eye level. The mini symbols can be self-adhesive translucent stickers for installation on the phololuminescent LLL strip. According ISO 15370 the symbol have the minimum height of 50 mm. For use at smaller LLL strips or electrical LED LLL, PET-X mini symbols are available.

Symbol	Description	Dimensions	Article number
九	Emergency exit (left hand)	50 x 50 mm	ES0001
Ţ.	Emergency exit (right hand)	50 x 50 mm	ES0002
NAME NO PORTION OF THE PORTION OF TH	Shipboard assembly station	50 x 50 mm	ES0004
<b>→</b>	Escape direction, arrow (90°)	50 × 50 mm	ES0006
<b>I</b>	Escape direction, arrow (45°)	50 x 50 mm	ES0007
<b>A</b>	Escape route forward/Esc. door	100 x 50 mm	ES1001
<b>↑</b> 🔁	Escape door opens left	100 x 50 mm	ES1002
← 🏖	Escape route to the left	100 x 50 mm	ES1004
<b>₹</b> →	Escape route to the right	100 x 50 mm	ES1005
	Escape route downstairs left	100 x 50 mm	ES1006
<b>2</b> 2	Escape downstairs right	100 x 50 mm	ES1007
<b>F</b> 2	Escape upstairs left	100 x 50 mm	ES1008
<b>A</b>	Escape upstairs right	100 x 50 mm	ES1009







# **LOW LOCATION LIGHTING MINI SYMBOLS**

Symbol	Description	Dimensions	Article number
	Assembly station forward (througt door)	100 x 50 mm	ES1030
<b>←</b> 💥	Assembly station left	100 x 50 mm	ES1032
*** <b>&gt;</b>	Assembly station right	100 x 50 mm	ES1033
<b>L</b> ***	Assembly station downstairs left	100 x 50 mm	ES1034
	Assembly station downstairs right	100 x 50 mm	ES1035
<b>*</b>	Assembly station upstairs left	100 x 50 mm	ES1036
<b>***</b> 7	Assembly station upstairs right	100 x 50 mm	ES1037
<b>1</b>	Assembly station forward/up	100 x 50 mm	ES1038
<b>+</b> =	Lifeboat left	100 x 50 mm	ES1052
<b>&gt;</b>	Lifeboat right	100 x 50 mm	ES1053
<b>↑</b>	Escape route forward left vertical	50 × 100 mm	ES1101
<b>↑</b>	Escape route forward right vertical	50 x 100 mm	ES1102
<b>←</b>	Escape route left vertical	50 x 100 mm	ES1103
<b>→</b>	Escape route right vertical	50 x 100 mm	ES1104
	Assembly station forward vertical	50 x 100 mm	ES1105



# **LOW LOCATION LIGHTING MINI SYMBOLS**

Symbol	Description	Dimensions	Article number
***	Assembly station left vertical	50 x 100 mm	ES1106
<b>&gt;</b>	Assembly station right vertical	50 x 100 mm	ES1107
<b>~</b>	LLL Stairs up to left	50 x 50 mm	ES1120
200	LLL Stairs up to right	50 x 50 mm	ES1121
EX + T	Escape route forward left vertical	50 x 200 mm	ES2501
EX-T 个 22 EX-T 个 53 EX-T 个 🔆	Escape route forward right vertical	50 x 200 mm	ES2502
EX-T	Assembly station forward vertical	50 x 200 mm	ES2503
	Fire extinguisher	50 x 50 mm	FS0001
<u>*</u>	Fire alarm call point	50 x 50 mm	FS0002
	Fire hose reel	50 x 50 mm	FS0003
<b>6</b> 8	Unconnected fire hose	50 x 50 mm	FS0004
TW .	Fire hydrant	50 x 50 mm	FC0048

ALL LLL MINI SYMBOLS ARE ALSO AVAILABLE AS PET-X PL FOR USE IN COMBINATION WITH LED LLL OR WHEN FIRE FIGHTING EQUIPMENT IS LOCATED AT THE OPPOSITE SIDE OF A CORRIDOR.



# ADDITIONAL AND OTHER LLL PRODUCTS

## STAIRNOSE MARKERS

Luminous stair step signs for marking stairs in escape routes mainly include stair step strips, side edge markers and round wall or floordots. Like regular stair step strips, our photoluminescent stair step strips also has an anti-slip coating which will reduce falling or tripping. The strips clearly display the steps at night or during a power failure.

Luminance intensity (mcd/m²)	10 min	60 min
Quality XXL	$700 \text{ mcd/m}^2$	$100 \text{ mcd/m}^2$
SNM1		
SNM2		
SNM3		

Article number	Description	Dimension
SNM1-100	Stair nose marker	1,0 m x 75 mm
SNM1-120	Stair nose marker	1,2 m x 75 mm
SNM2-100	Stair nose marker	1,0 m x 75 mm
SNM2-120	Stair nose marker	1,2 m x 75 mm
SNM3-100	Stair nose marker	1,0 m x 75 mm
SNM3-120	Stair nose marker	1,2 m x 75 mm





Including a self adhesive backing and 90 degrees angle (200 + 40 mm).

Article number	Description	Dimension
SEM50A	Stair edge marker	$50 \times 200 \text{ mm}$



## **PHOTOLUMINESCENT ROPE**

The T-ISS Photoluminescent rope is made out of photoluminescent pigment and high quality resin. After absorbing visible light, the Photoluminescent rope will glow for 8 up to 12 hours in the darkness.





Article number	Description	Dimension
PHROPE100	Photoluminescent rope	16 mm x 100 m
PHROPECL	Photoluminescent rope	Custom length



# ADDITIONAL AND OTHER LLL PRODUCTS

## **TRAILDOTS**

Photoluminescent aluminium traildots for marking routes with or without arrow. In diameter 90 mm or 200 mm. All traildots have a self-adhesive backing.

Also available: a special mounting bracked designed for anti-skid traildots to fix on metal staircases. Please contact us for more information of these mouning brackeds.

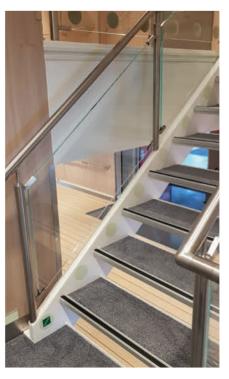








Article number	Description	Dimension
DOT090N-A	LLL Traildot antiskid neutral	Ø 90 mm
DOT200N-A	LLL Traildot antiskid neutral	Ø 200 mm
DOT090A-A	LLL Traildot antiskid arrow	Ø 90 mm
DOT200A-A	LLL Traildot antiskid arrow	Ø 200 mm
DOT090N-S	LLL Traildot smooth neutral	Ø 90 mm



## LIGHTLINE PU GUIDELINE

The PU guideline is extremely flexible and can be used for the marking of stairs, stairnoses and contourmarking. It has an anti-slip surface and is resistant against most chemicals. It can be fixed with doublesided foam tape or glue.

## **Technical data**

Width: 40 mm, insertstrip 35 mm
10 min. 200 mcd/m²
60 min. 28 mcd/m²





Art. number	Description	Dimension
LLPUG	LightLine PU Guideline	40 mm x 10 m

## **LLL SLOT STRIP**

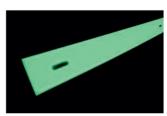
Our LLL Slot Strips are specialy designed with predrilled holes which allows you to install them on the roughest services.

## **Technical data**

Width: 1000 mm x 50 mm

Material: Aluminium Quality: XXL





Art. number	Description	Dimension	
ALUSLOT4	LLL Slot Strip	1000 mm x 50 mm	



# **ELECTRICAL LOW LOCATION LIGHTING**



Electrical Low Location Lighting systems can be installed both floor-mounted or wall-mounted. Electrical Low Location Lighting systems are considered 'active' systems, compared to 'passive' LLL systems made of photoluminescent material.

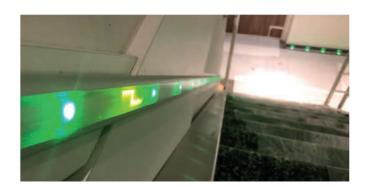
## **Certification and approvals**

Low Location Lighting systems comply with the environmental conditions and test procedures as defined in the requirements of the current editions of:

- IEC Pub. 598-2-22
- Regulation for the Performance of Type Tests for Electric Appliances Components
- Type Approval of Instrumentation and Automation Equipment, DNV.
- Type Approval System, Lloyds Register (LR)

## **Technical data LED-strip**

- Standard LED-distance: 200 mm
- "High brightness" LEDs in colour "true green" (540 mcd. minimum)
- IP Grade: IP 67
- Operating temp.: 15° C to + 55° C
- Life time: > 150.000 hours
- Due to high flexibility, the LED-strip can follow even 90° corners or tight curves without any electrical interruption











## **POWER BOX UNIT (PSU)**

The Power Box Unit (PSU) feeds the system with power (each LED-strip is fed from both side and two different PSUs for safety reasons). System activation can be done from the bridge either by an input signal (from SMS- or emergency shut down-system) on board or manually from the bridge by switching the system simply ON/OFF.

Nominal Voltage: 115-230 V AC/DC

 Average Power Consumption: 77 VA (under fully load)

• Output Voltage: 22 V DC • Output Power: 100 W

• Capable to feed up to 1.000 m LED-strip

• IP Grade: IP 55

• Batteries: 3 Sealed Lead Acid (7.26 kg)

Housing: Metal, in colour RAL 7035 (grey)

• Battery charging also under systemactivation

• Dimension: a) incl. Batt.: 445 x 340 x 127 mm

b) excl. Batt.: 280 x 340 x 127 mm

• Weight: a) incl. Batt.: ~ 16.85 kg

b) excl. Batt.: ~ 9.60 kg

• NO extra housing for batteries required (!)

• Cable Glands: 9 x grommets in different sizes

• Terminal configuration plan inside



## **AVAILABLE PROFILE TYPES**

We offer a wide range of profiles to integrate the LED-strip in – from profiles for wall mounting, floor mounting (low and high carpet profiles), via metal skirting boards till system integration into existing wooden wall panels or skirting boards on board



## **Aluminium Profile**

- Standard Colour: "Anodised Silver"
- Further colours on request either acc. to RAL or in powder coated quality
- Protection Covers



## **Polycarbonate Profile**

- Available in all RAL colours (standard Colour is "RAL 7026")
- Non toxic, halogen free, fire retardant
- Protection covers/caps in same quality



## **Skirting Board Profile**

- Original RIVINOX-/ BEZAULT-/ **SCHWEPPERSkirting Board Profiles**
- Available in colours "gold" and "silver"
- Other Skirting Profiles available on request



## Into the walls (w/o profile)

- Clipped-in from behind into the wall panels
- Installed into pre-manufactured wooden skirting board profiles (premanufactured cutouts) but w/o profile



# INSTALLATION, MEASUREMENTS AND CERTIFICATION

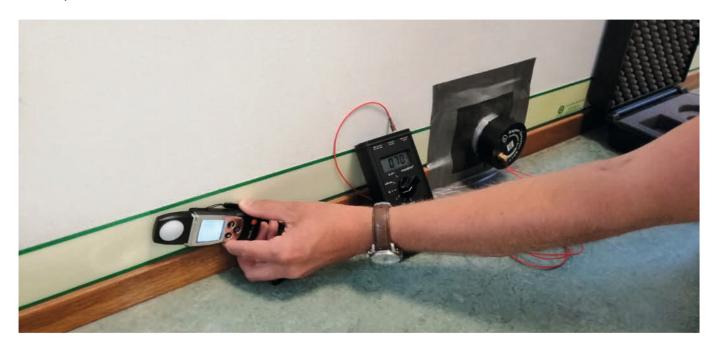
T-ISS is accredited by DNV to execute Low Location Lighting measurement services, our certification can be found on our website. As a vessel owner, you need to test all Low Location Lighting systems at least once every five years. T-ISS engineers will test the luminance of your LLL systems on-board with fully certified test equipment. The photoluminescence measurement process as well as equipment are all certified by DNV.

## Examples of our low location lighting measuring services:

- Photo luminescent Low Location Lighting measurements and tests (DNV certified)
- Electric Low Location Lighting measurements and tests (DNV certified)
- Low Location Lighting refurbishment or replacement

## Why are low location lighting measurements necessary?

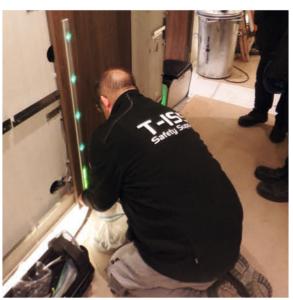
According to several regulations, vessels that carry passengers are obligated to have a Low Location Lighting system installed. This could be a photo luminescent system as well as an electric system. A photo luminescent system is charged by the lighting on the vessel and will use the energy it collects to light up in the dark. The big advantage of this system is that there are no electric installations that need to be installed.



After the measurements, the engineer that executed the measurement will report all readings in a clear overview. This includes all the upgrades and / or modifications that, when needed, you need to do to meet the required regulations.

## **Turn Key Solutions**

T-ISS offers service for engineering. Class Society approved the installation of the complete Safety Sign System including Escape Signs, Low Location Lighting Systems and Safety Instructions by our highly skilled and experienced engineers.









# INTRODUCTION

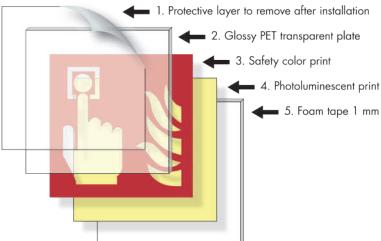
## Sustainability through innovation

SafeSign photoluminescent signs store the energy from light sources and release the light energy in the dark thanks to the use of 100% environmentally friendly photoluminescent material, free of toxic or radioactive additives and exceeding all required afterglow properties.

SafeSign innovated sign production by replacing the widely used PVC with a modified PET that is fully recyclable. PVC is increasingly banned due to its toxicity and flame resistance, our modified PET can be used safely anywhere. In addition, SafeSign's products are UV resistant, unlike PVC which quickly turns yellow. That's why SafeSign offers a 5-year warranty.

SafeSign prints on the back of the sign, another innovation, this way the print is protected from environmental influences and the result is signage with a glossy front. SafeSign signs are always easy to mount thanks to the self-adhesive backing. All signs are supplied with a protective front foil, which must be removed after mounting.





## The most economical signs

The cost of the signs themselves is only a small part of the total cost of your signage. Identification, ordering, transportation, installation and billing usually make up more than 90% of the total expenditure. With an expected lifespan of 10 to 15 years, you will reduce your expenses and apply an environmentally friendly and safe purchasing policy.





## WHY SHOULD PVC NOT BE USED FOR SIGNAGE?

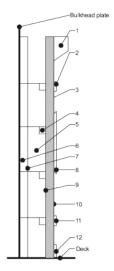
Solas Chapter 11-2 Reg 6 Part B 6.2 Part B - Prevention of Fire and Explosion Reg 6 Smoke Generation Potential and Toxicity

The purpose of this regulation is to reduce the hazard to life from smoke and toxic products generated during a fire in spaces where persons normally work or live. For this purpose, the quantity of smoke and toxic products released from combustible materials, including surface finishes, during fire shall be limited.

Paints, varnishes and other finishes used on exposed interior surfaces shall not be capable of producing excessive quantities of smoke and toxic products, this being determined in accordance with the Fire Test Procedures Code.

Solas Chapter 11-2 Reg 5 Part B 3.2.4.1

The following surfaces shall have low flame-spread characteristics in accordance with the Fire Test Procedures Code: In passenger ships, exposed surfaces in corridors and stairway enclosures and of bulkhead and ceiling linings in accommodation and service spaces (except saunas) and control stations, etc.



	Requirements	in SOLAS c	hapter 11-2 fo	r components	
Bulkhead components	Non- Combustible Material (5.3.1.1) (5.3.1.2.1)	Calorific Value (5.3.2.2)	Equivalent Volume (5.3.2.3)	Low flame spread (5.3.2.4)*	Smoke Production toxic products (6.2)
***************************************	(A)	(B)	(C)	(D)	(E)
1 moulding			Х		
2 signs (rescue/fire protection)				×	Х
3 wall panel (lining)	X				
4 grounds and supports	×				
5 draft stops	X				
6 insulation	X				
7 insulation surface**				X (5.3.2.4.1.2)	
8 decoration			Х		
9 painted surface** or		-		X (5.3.2.4.1.2)	
fabric or veneer**		X		X (5.3.2.4.1.2)	
10 painted surface or		-	х	X (5.3.2.4.1.1)	Х
fabric or veneer		Х	x	X (5.3.2.4.1.1)	Х
11 Low Location Light				×	Х
12 skirting board			x		

## Sign installation

SafeSign is the only manufacturer who supplies all signs, posters and LLL-strips with a selfadhesive backing. You will never have to use adhesives or other methods for fixing. The selfadhesive backing, from a PE closed-cell foam, is specifically selected to withstand the harsh marine environment. All signs, posters and LLLstrips are delivered with a protecting front film, which must be removed after mounting the product.

## **Recommended Sign Size**

Size in mm.	50 x 50	100 x 100	150 x 150	200 x 200	300 x 300	400 x 400
Distance	3 m.	8 m.	15 m.	20 m.	30 m.	40 m.
<b>^</b>		<b>K</b>	ŢŢ.	ŢŢ.	<b>1</b>	<b>A</b>

Note; these recommended sign sizes are based on normal lightning conditions of 100 lux.





# STANDARD SIGNS PRODUCT RANGE

Standard signs SafeSign	Symbol height	Class	Photoluminescence	
		ISO17398	10 min	60 min
PET-X, SafeSign XL, self adhesive	Standard dimensions as in catalogue	B+	75 mcd/m <sup>2</sup>	$10 \text{ mcd/m}^2$
PET-X, SafeSign XL mini LLL symbol, self adhesive	50 mm	B+	75 mcd/m <sup>2</sup>	10 mcd/m <sup>2</sup>
Transparant mini LLL symbol, self adhesive	50 mm	NA	NA	NA
PET-X, SafeSign non photoluminescent	As in catalogue	NA	NA	NA

Note; The standard symbol heights in the catalogue are 150 mm, except where the sign-height is mentioned 100 mm. All non-standard symbol heights can be produced on request. Other qualities photoluminescent available up to  $10 \text{ min} - 700 \text{ mcd/m}^2 / 60 \text{ min} - 90 \text{ mcd/m}^2$ .

Available on request	Symbol height	Class	Photoluminescence	
		ISO17398	10 min	60 min
Pet-X, SafeSign XL round edges, self adhesive	Standard dimensions as in catalogue	B+	75 mcd/m <sup>2</sup>	10 mcd/m <sup>2</sup>
Pet-X, SafeSign XL, self adhesive	50, 70, 100, 150, 200, 300, 400 mm	B+	75 mcd/m <sup>2</sup>	10 mcd/m <sup>2</sup>
Aluminium SafeSign XXL	Standard dimensions as in catalogue	C+	160 mcd/m <sup>2</sup>	22 mcd/m <sup>2</sup>
Aluminium SafeSign XXX, colourglow (safety colours in the dark)	Standard dimensions as in catalogue	Е	300 mcd/m <sup>2</sup>	40 mcd/m <sup>2</sup>
PVC, SafeSign XL, self adhesive	Standard dimensions as in catalogue		50 mcd/m <sup>2</sup>	$7 \text{ mcd/m}^2$
Retro-Reflective 3M, 5 year outdoor warranty, adhesive	50, 70, 100, 150, 200, 300, 400 mm	NA	NA	NA
Retro-Reflective 3M, 5 year outdoor warranty, PET-X 4 mm	50, 70, 100, 150, 200, 300, 400 mm	NA	NA	NA
Retro-Reflective 3M, 5 year outdoor warranty, Stainless steel, pickled and passivated 2 mm	50, 70, 100, 150, 200, 300, 400 mm	NA	NA	NA
Standard outdoor adhesive, 5 year outdoor warranty	50, 70, 100, 150, 200, 300, 400 mm	NA	NA	NA

Note; for installation options such as Mounting Panel Panoramic, see page 158-159.



## Emergency exit (left hand)



ESOOO1 150x150 mm 50x50 mm ISSA 4754422 IMPA 334422

#### Emergency exit (right hand)



ESO002 150x150 mm 50x50 mm ISSA 4754423 IMPA 334423

## Evacuation assembly point



ES0003 150x150 mm

#### Shipboard assembly station



ESO004 150x150 mm 50x50 mm ISSA 4754069 IMPA 334069

## Escape ladder



ESOOO5 150x150 mm 50x50 mm

## Escape direction, arrow (90°)



ES0006 150x150 mm 50x50 mm ISSA 4754420 IMPA 334420

## Escape direction, arrow (45°)



ESO007 150x150 mm 50x50 mm ISSA 4754421 IMPA 334421

#### Embarkation ladder



ES0008 150x150 mm ISSA 4754054 IMPA 334054

#### Marine evacuation slide



ESO009 150x150 mm 50x50 mm ISSA 4754055 IMPA 334055

#### Marine evacuation chute



ESOO10 150x150 mm 50x50 mm ISSA 4754070 IMPA 334070

## Lifeboat



ESO012 150x150 mm ISSA 4754050 IMPA 334050

#### Rescue boat



ESOO13 150x150 mm ISSA 4754051 IMPA 334051

#### Liferaft



ESO014 150x150 mm 50x50 mm ISSA 4754052 IMPA 334052

#### Davit-launched liferaft



ESO015 150x150 mm ISSA 4754053 IMPA 334053

## Door slides right to open



ESO017 150x150 mm 50x50 mm ISSA 4754483 IMPA 334483

## Door slides left to open



ESOO18 150x150 mm 50x50 mm ISSA 4754145 IMPA 334145

## Turn anticlockwise to open



ESO019 150x150 mm ISSA 4754152 IMPA 334152

## Turn clockwise to open



ESO020 150x150 mm ISSA 4754153 IMPA 334153

## Door opens by pulling left side



ESO021 150x150 mm ISSA 4754146 IMPA 334146

## Door opens by pulling right side



ESO022 150x150 mm ISSA 4754145 IMPA 334145

## Door opens by pushing left



ESO023 150x150 mm ISSA 4754152 IMPA 334152

## Door opens by pushing right



ESO024 150x150 mm ISSA 4754153 IMPA 334153

## Scramble net



ESO026 150x150 mm ISSA 4754989 IMPA 334989

## Descending device



ES0027 150x150 mm

## Free fall lifeboat



ES0028 150x150 mm

### Pump to open



ES0029 150x150 mm

### Helicopter landing area



ESO030 150x150 mm ISSA 4752440 IMPA 332440

### Helicopter pickup area



ES0031 150x150 mm

## **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

Standard size signs made of Pet-X material are all on stock and directly available. Each of the signs in this catalog are available in multiple different types of materials:

• Pet-X (PVC-free, the environment-friendly choice)

• Retro-Reflective

• Aluminum light

• PVC

• Transparant Vinyl

• White, self-adhesive vinyl (non-reflective)

Non-standard sizes and materials other than the standard Pet-X material are available upon request. See page 83 for more information.



Emergency window with escape ladder



ES0034 150x150 mm Rescue window



ES0035 150x150 mm Evacuation chair



ES0036 150x150 mm Tsunami evacuation building



ES0038 150x150 mm

Tsunami evacuation area



ES0039 150x150 mm Protection shelter



ES0040 150x150 mm Emergency exit impairm. left



ES0041 150x150 mm Emergency exit impairm. right



ES0042 150x150 mm

Evacuation temporary refuge



ES0043 150x150 mm PRACTICAL EXAMPLES ESCAPE ROUTE FOR PEOPLE WITH WALKING IMPAIRMENT











Escape route forward/Esc. door



ES1001

300x150 mm 100x50 mm

Escape door opens left



ES1002

300x150 mm 100x50 mm

Escape route downwards



ES1003 300x150 mm Escape route to the left



ES1004

300x150 mm 100x50 mm

Escape route to the right



ES1005

300x150 mm 100x50 mm

Escape route downstairs left



ES1006

300x150 mm 100x50 mm

Escape downstairs right



ES1007

300x150 mm 100x50 mm

Escape upstairs left



ES1008

300x150 mm 100x50 mm

Escape upstairs right



ES1009

300x150 mm 100x50 mm

**ASSEMBLY STATION LAND / ONSHORE** 

Assembly point forward/up



ES1015

300x150 mm

Assembly point downstairs left



300x150 mm ES1019

Assembly point downwards



ES1016

300x150 mm



ES1020

Assembly point downstairs right



300x150 mm

Assembly point to the left



ES1017

300x150 mm

Assembly point upstairs left



300x150 mm ES1021

Assembly point to the right



ES1018

300x150 mm

Assembly point upstairs right



ES1022

300x150 mm



## **ASSEMBLY STATION MARITIME / OFFSHORE**

#### Assembly station forward/up



ES1030

300x150 mm 100x50 mm

## Assembly station downstairs left



ES1034

300x150 mm 100x50 mm

# Assembly station downwards



ES1031 300x150 mm

## Assembly station downstairs right



ES1035

300x150 mm 100x50 mm

## Assembly station left



ES1032

300x150 mm 100x50 mm

## Assembly station upstairs left



ES1036

300x150 mm 100x50 mm

## Assembly station right



ES1033

300x150 mm 100x50 mm

## Assembly station upstairs right



ES1037

300x150 mm 100x50 mm

## Assembly station forward/up

Escape ladder forward/upwards



ES1038

ES1045

ES1050

300x150 mm 100x50 mm



300x150 mm 100x50 mm

300x150 mm

100x50 mm

## Escape ladder downwards



ES1046 300x150 mm



ES1051



300x150 mm Lifeboat to the left



Escape ladder to the left

ES1052

300x150 mm 100x50 mm

#### Escape ladder to the right



ES1048 300x150 mm

## Lifeboat to the right



300x150 mm ES1053 100x50 mm

## Lifeboat downstairs left

Lifeboat forward/up



ES1054 300x150 mm

# 300x150 mm Lifeboat downstairs right



ES1055 300x150 mm

## Lifeboat upstairs left



ES1056 300x150 mm

## Lifeboat upstairs right



ES1057 300x150 mm

## Escape route forward left vertical



ES1101 150x300 mm 50x100 mm

## Escape route forward right vertical



ES1102 150x300 mm 50x100 mm

## Assembly station to the right vertical

Escape route to the left vertical

ES1103

150x300 mm

50x100 mm



ES1107 150x300 mm 50x100 mm

# Escape route to the right vertical



ES1104 150x300 mm 50x100 mm



LLL Stairs up to left ES1120 50x50 mm



LLL Stairs up to right ES1121 50x50 mm

## Assembly station forward vertical



ES1105 150x300 mm 50x100 mm

# Assembly station to the left vertical



ES1106 150x300 mm 50x100 mm



## LAND / ONSHORE

Assembly point sign



ES2000 250x333 mm 300x400 mm Assembly point sign number



ES2002 ES2003 23 4 ES2004 400x400 mm 800x800 mm 1000x1000 mm Assembly point sign letter



BC ES2012 ES2013 D ES2014 400x400 mm 800x800 mm 1000x1000 mm



#### **MARITIME / OFFSHORE**

## MARITIME ASSEMBLY STATIONS ARE IN PRINCIPLE ALWAYS IDENTIFIED BY LETTER

Assembly station location sign



ES2100 250x333 mm 360x480 mm Assembly station location sign



ES2101 В ES2102 C ES2103 D ES2104 Ē ES2105 ES2106 300x300 mm 480x480 mm

WHEN THE ASSEMBLY **STATION IS LOCATED NEAR A LIFEBOAT, A NUMBER CAN BE USED** 

Assembly station location sign



ES2111 2 ES2112 300x300 mm 480x480 mm

## LIFEBOAT OR EMBARKATION STATIONS ALWAYS **IDENTIFIED BY NUMBER**

Lifeboat location sign



250x333 mm 360x480 mm



Lifeboat location 1 sign

Embarkation station lifeboat

2



MBARKATION STATION

ES2122 ES2123 2 4 ES2124 5 ES2125 ES2126 300x300 mm 480x480 mm

ES2132

ES2133

4 ES2134

300x300 mm

480x480 mm

ES2121

Embarkation station chute



ES2140 250x333 mm 360x480 mm Embarkation station chute



ES2141 2 ES2142 3 ES2143 4 ES2144 300x300 mm 480x480 mm

Embarkation station lifeboat



Assembly station left

ES2200

300x100 mm

**ASSEMBLY** 

**STATION** 

ES2130 250x333 mm 360x480 mm

Assembly station right



ES2201 300x100 mm Lifeboat left



FS2220 300x100 mm Lifeboat right



FS2221 300x100 mm

**MATERIAL SPECIFICATIONS & AVAILABLE SIZES** 

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 PVC
 Transparant Vinyl
 White, self-adhesive vinyl (non-reflective) Non-standard sizes and materials other than the standard Pet-X material are available upon request. See page 83 for more information.



#### Number 0



ES3000 75x150 mm ISSA 4754200 IMPA 334200

#### Number 1



ES3001 75x150 mm ISSA 4754201 IMPA 334201

#### Number 2



ES3002 75x150 mm ISSA 4754202 IMPA 334202

#### Number 3



ES3003 75x150 mm ISSA 4754203 IMPA 334203

## Number 4



ES3004 75x150 mm ISSA 4754204 IMPA 334204

## Number 5



ES3005 75x150 mm ISSA 4754205 IMPA 334205

#### Number 6



ES3006 75x150 mm ISSA 4754206 IMPA 334206

## Number 7



ES3007 75x150 mm ISSA 4754207 IMPA 334207

#### Number 8



ES3008 75x150 mm ISSA 4754208 IMPA 334208

#### Number 9



ES3009 75x150 mm ISSA 4754209 IMPA 334209

#### Number 10



ES3010 100x150 mm

#### Number



11 ES3011 12 ES3012 13 ES3013 14 ES3014 15 ES3015 100x150 mm

## Letter A



ES3020 75x150 mm ISSA 4754210 IMPA 334210

## Letter B



ES3021 75x150 mm ISSA 4754211 IMPA 334211



Letter C

ES3022 75x150 mm ISSA 4754211 IMPA 334211

## Letter D



ES3023 75x150 mm ISSA 4754213



IMPA 334213

## Letter E



ES3024 75x150 mm ISSA 4754214 IMPA 334214

## Letter F



ES3025 75x150 mm ISSA 4754215 IMPA 334215

### Letter G



ES3026 75x150 mm ISSA 4754216 IMPA 334216

### Letter H



ES3027 75x150 mm ISSA 4754217 IMPA 334217

Letter J



ES3028 75x150 mm

# Letter K



ES3029 75x150 mm





Deck 0



ES3030 150x150 mm Deck 1



ES3031 150x150 mm Deck 2



ES3032 150x150 mm Deck 3



ES3033 150x150 mm

Deck 4



ES3034 150x150 mm Deck 5



ES3035 150x150 mm Deck 6



ES3036 150x150 mm Deck 7



ES3037 150x150 mm

Deck 8



ES3038 150x150 mm Deck 9



ES3039 150x150 mm Deck 10



ES3040 150x150 mm Deck



11 ES3041 12 ES3042 13 ES3043 14 ES3044 15 ES3045 16 ES3046

Number -2



ES3048 150x150 mm Number -1



ES3049 150x150 mm Number 0



ES3050 150x150 mm Number 1



ES3051 150x150 mm

Number 2



ES3052 150x150 mm Number 3



ES3053 150x150 mm 4

Number 4

ES3054 150x150 mm Number 5



ES3055 150x150 mm

Number 6



ES3056 150x150 mm Number 7



ES3057 150x150 mm Number 8



ES3058 150x150 mm Number



9 ES3059 10 ES3060 11 ES3061 12 ES3062 13 ES3063 14 ES3064 15 ES3065 16 ES3066

**MATERIAL SPECIFICATIONS & AVAILABLE SIZES** 



#### Letter A



ES3070 150x150 mm

#### Letter B



ES3071 150x150 mm

#### Letter C



ES3072 150×150 mm

#### Letter D



ES3073 150x150 mm

## Letter E



ES3074 150x150 mm

## Letter F



ES3075 150x150 mm

## Letter G



ES3076 150x150 mm

#### Letter



H ES3077 ES3078 ES3079 ES3080 ES3081 M ES3082 150x150 mm

#### Doorhandle arrow right



ES5020 80x120 mm

## Doorhandle arrow left



ES5021 80x120 mm

## WT doorhandle open right



ES5022 100x200 mm

## WT doorhandle open left



ES5023 100x200 mm

## Escape hatch open right



Push door to open

ES5024 200x75 mm

## Escape hatch open left



ES5025 200x75 mm





ES5028 100x100 mm

## Primary escape route ISO 17631



ES5051 150x150 mm ISSA 4756070 IMPA 336070

Secondary escape route ISO 17631



ES5052 150x150 mm ISSA 4756071 IMPA 336071

## Doorhandle sign right



ES5055 75x200 mm

ES5027

100x100 mm



ES5056 75×200 mm





ES5057 75x200 mm



ES5058 75×200 mm

# Escape door marking plate



ES5075 600x250 mm 750x300 mm 850x340 mm

## Watertight door



ES5080 150x150 mm

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## Lifeboat forward left



ES5101 300x100 mm ISSA 4754300 IMPA 334300

## Lifeboat to the left



ES5105 300x100 mm ISSA 4754304 IMPA 334304

#### Lifeboat downwards left



ES5109 300×100 mm ISSA 4754308 IMPA 334308

## Assembly station upstairs left



ES5113 300x100 mm ISSA 4754322 IMPA 334322

## Assembly station downstairs left



ES5117

ISSA 4754326 300x100 mm IMPA 334326

## Refuge point disabled left



ES5125 300x100 mm

## Lifeboat forward right



ES5102 ISSA 4754301 300x100 mm IMPA 334301

## Lifeboat to the right



FS5106 300x100 mm ISSA 4754305 IMPA 334305

## Lifeboat downwards right



ES5110 300x100 mm

ISSA 4754309 IMPA 334309

## Assembly station upstairs right



ES5114 300x100 mm ISSA 4754323 IMPA 334323

## Assembly station downstairs right



ES5118 300x100 mm

ISSA 4754327 IMPA 334327

## Refuge point disabled right



ES5126 300x100 mm

## Lifeboat upstairs left



ES5103 300x100 mm ISSA 4754302 IMPA 334302

## Lifeboat downstairs left



ES5107

ISSA 4754306 300x100 mm IMPA 334306

#### Assembly station forward left



ES5111 300x100 mm

ISSA 4754320 IMPA 334320

## Assembly station to the left



ES5115 300x100 mm ISSA 4754324 IMPA 334324

## Assembly station downwards left



ES5119 300x100 mm

ISSA 4754328 IMPA 334328

## Refuge point keep clear



ES5127 300x100 mm ISSA 4754821 IMPA 334821

## Lifeboat upstairs right



ES5104 300x100 mm ISSA 4754303 IMPA 334303

## Lifeboat downstairs right



ES5108 300x100 mm

ISSA 4754307 IMPA 334307

## Assembly station forward right



ES5112 300x100 mm

IMPA 334321

## Assembly station to the right



ES5116 300x100 mm ISSA 4754325 IMPA 334325

## Assembly station downwards right



ES5120 300x100 mm ISSA 4754329 IMPA 334329



# **ESCAPE ROUTE SIGNS**

## Exit left hand



ES5128 300x150 mm

ISSA 4754410 IMPA 334410

## Exit upstairs left



ES5132 450x150 mm

ISSA 4754402 IMPA 334402

## Exit downstairs left



ES5136 450x150 mm

ISSA 4754406 IMPA 334406

## Exit lefthand



ES5140 450x150 mm ISSA 4754410 IMPA 334410

## Emergency exit forward left



ES5150 450x150 mm

## Emergency exit to the left



ES5154 450x150 mm

## Emergency exit downwards left



ES5158 450x150 mm

## Exit right hand



ES5129 300x150 mm

ISSA 4754411 IMPA 334411

## Exit upstairs right



FS5133 450x150 mm ISSA 4754403 IMPA 334403

#### Exit downstairs right



ES5137 450x150 mm ISSA 4754407 IMPA 334407

## Exit righthand



ES5141 450x150 mm ISSA 4754411 IMPA 334411

## Emergency exit forward right



ES5151 450x150 mm

## Emergency exit to the right



ES5155 450x150 mm

## Emergency exit downwards right



ES5159 450x150 mm

## Exit forward left



ES5130 450x150 mm ISSA 4754400 IMPA 334400

#### Exit to the left



ES5134

ISSA 4754404 450x150 mm IMPA 334404

#### Exit down



ES5138 450x150 mm

ISSA 4754408 IMPA 334408

## Emergency exit only right



ES5142 450x150 mm ISSA 4754413 IMPA 334413

## Emergency exit upstairs left



ES5152 450x150 mm

## Emergency exit downstairs left



ES5156 450x150 mm

## Exit forward right



ES5131 450x150 mm ISSA 4754401 IMPA 334401

## Exit to the right



ES5135 450x150 mm

ISSA 4754405 IMPA 334405

## Exit down



ES5139 450x150 mm ISSA 4754409 IMPA 334409

## Emergency exit only left



ES5143 450x150 mm ISSA 4754412 IMPA 334412

## Emergency exit upstairs right



ES5153 450x150 mm

## Emergency exit downstairs right



ES5157 450x150 mm





Slide right to open



ES5201 450x150 mm

ISSA 4754483 IMPA 334483

Suppl. text escape route

ESCAPE ROUTE

ES5301 450x150 mm ISSA 4754340 IMPA 334340

Suppl. text deck



ES5305 400x150 mm

IMPA 3345470

Suppl.text Secondary escape to assembly station

**SECUNDARY ESCAPE** TO ASSEMBLY STATION

ES5309

400x150 mm

Suppl. text EXIT emergency use only



ES5313 300x150 mm

ISSA 4754424 IMPA 334424

Suppl.text Assembly station



ES5317 300x150 mm Slide left to open



ES5202 450x150 mm

ISSA 4754482 IMPA 334482

Suppl. text escape door

ESCAPE DOOR

ES5302 450x150 mm ISSA 4754343 IMPA 334343

Suppl. text stairway

STAIRWAY

ES5306 400x150 mm

ISSA 4754417 IMPA 334471

Suppl. text EXIT



ES5310 150x150 mm ISSA 4754425 IMPA 334425

Suppl. text EMERGENCY EXIT



ES5314 150×150 mm ISSA 4754424 IMPA 334424

Suppl.text EXIT secondary escape



ES5318 300x150 mm

ALL SYMBOLS ARE AVAILABLE WITH ADDITIONAL TEXT



TEXT

Escape ladder



**ESCAPE** LADDER

ES5211 450x150 mm

ISSA 4754188 IMPA 334188

Suppl. text escape window

ESCAPE WINDOW

ES5303 ISSA 4754344 450x150 mm IMPA 334344

Suppl. text wheelhouse

WHEELHOUSE

ES5307 300x100 mm

Suppl. text EXIT



ES5311 300x150 mm

Suppl. text EMERGENCY EXIT



ES5315 300x150 mm Helideck



ES5212 450x150 mm ISSA 4754189 IMPA 334189

Suppl. text escape hatch

ESCAPE HATCH

ES5304 ISSA 4754342 450x150 mm IMPA 334342

Suppl. text Primary escape to assembly station

PRIMARY ESCAPE TO ASSEMBLY STATION

ES5308 400x150 mm

Suppl. text EXIT emergency use only



ES5312 150x150 mm ISSA 4754424 IMPA 334424

Suppl. text Emergency exit

**EMERGENCY EXIT** 

ES5316 150x50 mm



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# RESCUE SIGNS

#### First aid



RS0001 150x150 mm ISSA 4754150 IMPA 334150

#### Stretcher



RS0002 150x150 mm ISSA 4754071 IMPA 334071

## Safety shower



RS0003 150x150 mm ISSA 4754145 IMPA 334145

#### Eyewash station



RS0004 150x150 mm ISSA 4754152 IMPA 334152

## Emergency telephone



RS0005 150x150 mm ISSA 4754153 IMPA 334153

#### Doctor



RS0006 150x150 mm ISSA 4754152 IMPA 334152

## Medical grab bag



RS0007 150x150 mm ISSA 4754135 IMPA 334135

## AED (heart defibrillator)



RS0008 150x150 mm ISSA 4754137 IMPA 334137

#### EEBD (em. breathing device)



RS0009 150x150 mm ISSA 4754078 IMPA 334078

## Oxygen resuscitator



RS0010 150x150 mm ISSA 4754048 IMPA 334048

#### Emergency stop button



RS0011 150x150 mm ISSA 4754154 IMPA 335154

#### Drinking water



RS0012 150x150 mm

#### Break to obtain access



RS0013 150x150 mm ISSA 4754145 IMPA 334145

#### Liferaft knife



RS0014 150x150 mm ISSA 4754152 IMPA 334152

## **Emergency hammer**



RS0015 150x150 mm

## Child seat detection (CPOD)



RS0016 150x150 mm

## Lifebuoy



RS0020 150x150 mm ISSA 4754056 IMPA 334056



150x150 mm



RS0021 ISSA 4754057 IMPA 334057

## Lifebuoy with line



RS0023



150x150 mm ISSA 4754134 IMPA 334134



## Lifebuoy with light



RS0022 150x150 mm ISSA 4754058 IMPA 334058



# Lifebuoy with light, line and smoke



RS0026 150x150 mm ISSA 4754109 IMPA 334109

## Shipboard general alarm



RS0027 150x150 mm ISSA 4754155 IMPA 334155

# Lifebuoy with line and smoke



RS0024 150x150 mm

# Lifebuoy with light and smoke



RS0025 150x150 mm ISSA 4754059 IMPA 334059

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# **RESCUE SIGNS**

## Lifejacket



RSO028 150x150 mm ISSA 4754060 IMPA 334060

## Child's lifejacket



RS0029 150x150 mm ISSA 4754061 IMPA 334061

## Infant's lifejacket



RSO030 150x150 mm ISSA 4754080 IMPA 334080

## Lifejacket storage quanties



RS2004 450x400 mm Specify desired numbers

## Search and rescue transponder



RSO031 150x150 mm ISSA 4754065 IMPA 334065

## Survival craft distress signal



RS0032 150x150 mm ISSA 4754066 IMPA 334066

## Rocket parachute flare



RSO033 150x150 mm ISSA 4754067 IMPA 334067

## Line throwing appliance



RSO034 150x150 mm ISSA 47554068 IMPA 334068

## VHF portable radio



RSO035 150x150 mm ISSA 4754063 IMPA 334063

## EPIRB (em. position indic. radio beacon)



RS0036 150x150 mm ISSA 4754064 IMPA 334064

## Survival clothing



RSO037 150x150 mm ISSA 4754062 IMPA 334062

## Person overboard call point



RS0038 150x150 mm

## **Evacuation mattress**



RS0039 150x150 mm

## First aid responder



RS0040 150x150 mm

## Directional indicator resque equipment



RS0100 50x150 mm

## **USE OF DIRECTIONAL INDICATOR**





# **RESCUE SIGNS**

## Anti exposure suit



RS1001 150x150 mm ISSA 4754076 IMPA 334076

## Thermal protective aid



RS1002 150x150 mm ISSA 4754075 IMPA 334075

## First aid kit



RS1003 150x150 mm ISSA 4752413 IMPA 332413

## Shipboard smoke hood



RS1004 150x150 mm ISSA 4754183 IMPA 334183

## Emergency torch



RS1005 150x150 mm

## Safety equipment storage



RS1006 150x150 mm ISSA 4754184 IMPA 334184

## Safety locker (shipboard)



RS1007 150x150 mm

## First aid call point



RS1008 150x150 mm ISSA 4754393 IMPA 334393

## General shipboard alarm



RS1009 150x150 mm ISSA 4754155 IMPA 334155

## Aldis lamp



RS1010 150x150 mm

## Voyage data recorder



RS1011 150x150 mm ISSA 4754157 IMPA 334157

## Rescue ring



RS1012 150x150 mm

## Rescue basket



RS1013 150x150 mm

## Jason cradle



RS1014 150x150 mm

## Smoke signal



RS1015 150x150 mm

## Working lifejacket



RS1016 150x150 mm

## Handheld compass



RS1017 150x150 mm

## Breathing apparatus



RS1018 150x150 mm

## Survival hook



RS1019 150x150 mm

## Portable gas detector



RS1050 150x150 mm

## Safety locker



RS1051 150x150 mm

## Helicopter crash kit



RS1052 150x150 mm

## Spill kit



RS1053 150x150 mm

## Emergency telephone



RS1054 150x150 mm

## Safety harness



RS1055 150x150 mm



# **RESCUE SIGNS**

## Lifejacket quantity



RS2001 150x200 mm Specify desired numbers

## Childs lifejacket quantity



RS2002 150x200 mm Specify desired numbers

## Infant's lifejacket quantity



RS2003 150x200 mm Specify desired numbers

## Lifejacket storage quanties



RS2004 450x400 mm Specify desired numbers

## Immersion suit quantity



RS2005 150x200 mm Specify desired numbers

## **EEBD** quantity



RS2006 150x200 mm Specify desired numbers

AED hearth defibrillator



RS2010 150x200 mm

## Protective mask



RS2011 150x200 mm

#### Close proximity suit



RS2012 150x200 mm

## Break glass to open escape door



RS2013 150x200 mm

## Emergency stop



RS2014 150x200 mm

## Emergency unlocking escape door



RS2015 150x200 mm

## Abandon platform



RS2016 150x200 mm

## Emergency stop extuinguishing system



RS2017 150x200 mm

## Immersion suit storage



RS3001 150×150 mm ISSA 4754062 IMPA 334062



Lifejacket storage

RS3002 150x150 mm ISSA 4754060 IMPA 334060

## Child's lifejacket storage



RS3003 150x150 mm ISSA 4754061 IMPA 334061

## Infant's lifejacket storage



RS3004 150x150 mm ISSA 4754142 IMPA 334142



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• Aluminum light

• PVC

• Transparant Vinyl

• White, self-adhesive vinyl (non-reflective)

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# **RESCUE SIGNS**

#### First aid



RS5001 300x100 mm

ISSA 4754171 IMPA 334171

## Emergency eye wash



RS5002 300x100 mm

ISSA 4754177 IMPA 334177

### Stretcher



RS5003 300x100 mm

ISSA 4754172 IMPA 334172

## Emergency shower



RS5004 300x100 mm

ISSA 4754176 IMPA 334176

## Emergency telephone



RS5005 300x100 mm ISSA 4754178 IMPA 334178

#### Emergency stop



**EMERGENCY** STOP

RS5006 300x100 mm ISSA 4754179 IMPA 334179

#### Protective equipment



**PROTECTIVE EQUIPMENT** 

RS5007 300x100 mm

ISSA 4754174 IMPA 334174

#### Safe for entry



SAFE FOR **ENTRY** 

RS5008 300x100 mm ISSA 4754175 IMPA 334175

#### Safety equipment



RS5009 300x100 mm ISSA 4754184 IMPA 334184

#### Smoking area



**SMOKING** AREA

RS5010 300×100 mm

ISSA 4754185 IMPA 334185

#### Eating and drinking area



**EATING AND** DRINKING AREA

RS5011 300x100 mm ISSA 4754186 IMPA 334186

#### Pollution control equipment



POLLUTION CONTROL **EQUIPMENT** 

RS5012 300×100 mm

## Drinking water



## DRINKING WATER

RS5013 300x100 mm ISSA 4754180 IMPA 334180

## Breathing apparatus



**BREATHING APPARATUS** 

RS5014 300x100 mm

ISSA 4754182 IMPA 334182

## **Emergency equipment**



**EMERGENCY EQUIPMENT** 

RS5015

ISSA 4754173 300x100 mm IMPA 334173

## Medical grab bag



**MEDICAL GRAB BAG** 

RS5016 300x100 mm

## Defibrillator



**DEFIBRILLATOR** 

RS5017 300x100 mm

ISSA 4754137 IMPA 334137

## Lifejacket



**LIFEJACKET** 

RS5018 150x50 mm

## Lifejackets inside lifeboat



**LIFEJACKETS INSIDE LIFEBOAT** 

RS5019 300x100 mm

## Lifejackets under seat



**LIFEJACKETS UNDER SEAT** 

**IMMERSION** 

SUIT

RS5020 150x50 mm

## **EEBD**



E.E.B.D.

RS5021 150x50 mm

#### Escape set



**ESCAPE** SET

RS5022 150x50 mm

## Smoke hood



**SMOKE** HOOD

RS5023 150x50 mm

# Immersion suit



RS5024 150x50 mm

## Break glass in emergency



RS5025 300x100 mm

ISSA 4754187 IMPA 334187

## ALL SYMBOLS ARE AVAILABLE WITH ADDITIONAL TEXT



Text

text

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# FIRE FIGHTING SIGNS

## Fire extinguisher



FSO001 150x150 mm 50x50 mm ISSA 4756100 IMPA 336100

## Fire alarm call point



FS0002 150x150 mm 50x50 mm ISSA 4756101 IMPA 336101

#### Fire hose reel



FS0003 150x150 mm 50x50 mm ISSA 4756102 IMPA 336102

## Unconnected empty fire hose



FS0004 150x150 mm 50x50 mm ISSA 4756088 IMPA 336088

## Fire emergency telephone



FS0005 150x150 mm ISSA 4756104 IMPA 336104

## Collection of firefighting equipment



FS0006 150x150 mm ISSA 4756103 IMPA 336103

## Fire blanket



FS0007 150x150 mm

## Fire protection door



FS0008 150x150 mm

## Fixed fire extinguishing battery



FS0009 150x150 mm ISSA 4756048 IMPA 336048

## Wheeled fire extinguishing



FS0010 150x150 mm

## Portable foam applicator unit



FS0011 150x150 mm ISSA 4756036 IMPA 336036

## Water fog applicator



FS0012 150x150 mm ISSA 4756024 IMPA 336024

## Fixed fire extinguishing installation



FS0013 150x150 mm ISSA 4756044 IMPA 336044

## Fixed fire extinguishing bottle



FS0014 150x150 mm

#### Remote release station



FS0015 150x150 mm ISSA 4756808 IMPA 336808

## Fire monitor



FS0016 150×150 mm

## Fire alarm flashing light



FS0017 150x150 mm

## Firefighter's lift



FS0018 150x150 mm

## Directional indicator fire equipment



FS0030 50x150 mm ISSA 4756210 IMPA 336210

## **USE DIRECTIONAL INDICATOR**



## Fire hydrant



FC0048 150x150 mm ISSA 4756815 IMPA 336815

## Dry hydrant



FS0201 150x150 mm

### Fire hydrant



FS0202 150x150 mm

## Underground fire hydrant



FS0203 150x150 mm

## Removable fire monitor



FS0204 150x150 mm

## Remote control fire extinguish system



FS0205 150x150 mm

## Hose box with nozzle



FS0206 150x150 mm

## Fire fighter



FS0207 150x150 mm

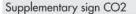
## Fire alarm horn



FS0208 150x150 mm

# FIRE FIGHTING SIGNS

#### **SUPPLEMENTARY COLOURS ACCORDING ISO 17631**





FS1001 50x150 mm

## Supplementary sign Foam



FS1002 50x150 mm

## Supplementary sign Halon



FS1003 50x150 mm

## Supplementary sign Nitrogen



FS1004 50x150 mm

## Supplementary sign Powder



FS1005 50x150 mm

## Supplementary sign Water



FS1006 50x150 mm

## Supplementary sign Novec 1230



FS1007 50x150 mm

## Supplementary sign Aerosol



FS1008 50x150 mm

## Supplementary sign Inergen



FS1009 50x150 mm

## Suppl. sign Drenching/Deluge



FS1010 50x150 mm

## Supplementary sign Sprinkler



FS1011 50x150 mm

## Supplementary sign Watermist



FS1012 50x150 mm

## Supplementary sign CO2



FS1051 150x50 mm

# Supplementary sign Foam



FS1052 150x50 mm

## Supplementary sign Nitrogen



FS1054 150x50 mm

## Supplementary sign Powder



FS1055

## Supplementary sign Water



FS1056 150x50 mm

## Supplementary sign Novec 1230



FS1057 150x50 mm

## Supplementary sign Aerosol



FS1058 150x50 mm

## Supplementary sign Inergen



FS1059 150x50 mm

## Suppl. sign Drenching/Deluge



FS1060 150x50 mm

## Supplementary sign Sprinkler



FS1061 150x50 mm

## Supplementary sign Watermist



FS1062 150x50 mm

## Supplementary sign CO2 ..kg



FS1151 150x50 mm

## Supplementary sign Foam ..L



FS1152 150x50 mm

## Supplementary sign Powder ..kg



FS1155 150x50 mm

## Supplementary sign water ..L



FS1156 150x50 mm

## ON REQUEST THESE SUPPLEMENTARY SIGNS CAN BE COMBINED WITH A FIREFIGHTING SIGN AS ONE PIECE

## **ACCORDING TO ISO 24409-2 AND ISO 17631**

Grey – CO2 or N (Nitrogen)

Yellow - F (Foam)

Brown - Gas other than CO2 or N, type of gas need to be indicated

White - P (Powder)

Green - W (Water) or D (Drenching/Deluge)

Orange - S (Sprinkler or high pressure water, such as watermist)



# FIRE FIGHTING SIGNS

## Fire extinguisher



FS2001 150x200 mm ISSA 4756120 IMPA 336120

## Fire alarm



FS2002 150x200 mm ISSA 4756121 IMPA 336121

## Fire hose reel



FS2003 150x200 mm ISSA 4756122 IMPA 336122

## Fire hose with nozzle



FS2004 150x200 mm

## Fire phone



FS2005 150x200 mm ISSA 4756124 IMPA 336124

## Fire point



FS2006 150x200 mm ISSA 4756123 IMPA 336123

## Emergency shutdown



FS2007 150x200 mm

## General alarm



FS2009 150x200 mm

## Text on request



FS2010 150x200 mm

## Fire door



FS2013 150x200 mm

## Fire door keep closed



FS2014 150x200 mm

## Release station deluge



FS2011 150x200 mm

## Text on request



FS2012 150x200 mm

## Supplementary text Fire extinguisher



FS2050 150x50 mm

## Supplementary text on request



FS2051 150x50 mm





# FIRE FIGHTING SIGNS

## Number 0



FS3000 75x150 mm ISSA 4756250 IMPA 336250

#### Number 1



FS3001 75x150 mm ISSA 4756251 IMPA 336251

#### Number 2



FS3002 75x150 mm ISSA 4756252 IMPA 336252

#### Number 3



FS3003 75×150 mm ISSA 4756253 IMPA 336253

#### Number 4



FS3004 75x150 mm ISSA 4756254 IMPA 336254

#### Number 5



FS3005 75x150 mm ISSA 4756255 IMPA 336255

#### Number 6



FS3006 75x150 mm ISSA 4756256 IMPA 336256

#### Number 7



FS3007 75x150 mm ISSA 4756257 IMPA 336257

#### Number 8



FS3008 75x150 mm ISSA 4756258

#### Number 9



FS3009 75×150 mmm ISSA 4756259





IMPA 336259

## Fire hose reel



Fire hose reel

FS5001 300x100 mm ISSA 4756145 IMPA 336145

#### Fire hose with nozzle



Fire hose with nozzle

FS5002 300x100 mm

## In case of fire break glass



In case of fire break glass

FS5003 ISSA 4756143 300x100 mm IMPA 336143



Fire alarm

Fire alarm

FS5004 300x100 mm ISSA 4756141 IMPA 336141

## Fire alarm call point



Fire alarm call point

FS5005 300x100 mm

ISSA 4756142 IMPA 336142

## Fire blanket



Fire blanket

FS5006 300x100 mm

ISSA 4756150 IMPA 336150

## Fire hydrant



Fire hydrant

FS5007 300x100 mm

## Sprinkler control valve



Sprinkler control valve

FS5008 300x100 mm ISSA 4756153 IMPA 336153

## Fire extinguisher



Fire extinguisher

FS5009 300x100 mm ISSA 4756140 IMPA 336140

#### Fire equipment stored inside



Fire fighting equipment stored inside

FS5010 300x100 mm ISSA 4756149 IMPA 336149

## Fire point



FS5011 ISSA 4756147 300x100 mm IMPA 336147

## For use on flammable liquid



For use on flammable liquid fires

FS5012 300x100 mm ISSA 4756164 IMPA 336164

## For use on electrical fires



For use on electrical fires

FS5013 ISSA 4756165 300x100 mm IMPA 336165

### For use on any fires



For use on any fires

FS5014 300x100 mm ISSA 4756163 IMPA 336163

### Used only in case of fire



To be used only in the case of fire

FS5015 300x100 mm ISSA 4756151 IMPA 336151

## Sprinkler stop valve



Sprinkler stop valve

FS5016 300x100 mm

ISSA 4756152 IMPA 336152

## **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

Standard size signs made of Pet-X material are all on stock and directly available. Each of the signs in this catalog are available in multiple different types of materials: Pet-X (PVC-free, the environment-friendly choice)
 Retro-Reflective
 Aluminum light
 PVC
 Transparant Vinyl
 White, self-adhesive vinyl (non-reflective) Non-standard sizes and materials other than the standard Pet-X material are available upon request. See page 83 for more information.



# FIRE FIGHTING SIGNS

## Open valve before running out hose



FS5017 300x100 mm

ISSA 4756146 IMPA 336146

## Foam inlet



FS5019 300x100 mm ISSA 4756155 IMPA 336155

#### Firemans suit



FS5020 300x100 mm

ISSA 4756158 IMPA 336158

## Fire pump start button



FS5021 300x100 mm ISSA 4756159 IMPA 336159



# **ALL SYMBOLS AVAILABLE** WITH ADDITIONAL TEXT



**TEXT Symbol** 

## Fire blanket



FS6001 100x200 mm ISSA 4756434 IMPA 336434

## Water extinguisher



FS6002 100x200 mm ISSA 4756430 IMPA 336430

## Foam extinguisher



FS6003 100x200 mm ISSA 4756431 IMPA 336431

## Powder extinguisher



FS6004 100x200 mm ISSA 4756432 IMPA 336432

## CO<sup>2</sup> extinguisher



FS6005 100x200 mm ISSA 4756433 IMPA 336433

## Water



0

0

FS6050 80x200 mm

## Foam spray



3

(8)

CO2

FS6051 80x200 mm

Dry powder

FS6052 80x200 mm



## BC powder



Fire hose

**0** \*\*

3

➂

FS6053 80x200 mm

FS6057

80x200 mm

## Powder M28



FS6054 80x200 mm



Fire hose reel



FS6058 80x200 mm



FS6055 80x200 mm



Wet chemical



## CO2



FS6056 80x200 mm



Hydro-spray



FS6060 80x200 mm



Extinguisher backplate



FS6101 300x870 mm

# IMO A.1116(30) AND ISO 24409-2 FIRE CONTROL SIGNS

All vessels built from 2019 or at renovation, must have their safety signs in compliance with IMO A.1116(30) which refers to the ISO 24409-2. Our IMO signs comply with the ISO 24409-2 standard. This means that some of the fire control signs are replaced by standardized ones in the ISO 24409-2. In the overview below you see some examples of signs that are replaced, and which signs you should use if you need to comply with the new ISO 24409-2 regulations. If you have any questions regarding this new standard, please contact us.





## Fire hose with spray/jet



#### Fire locker



#### General alarm

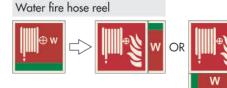


## Foam fire extinguisher



## Powder fire extinguisher





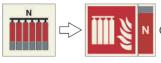
# Remote release CO<sub>2</sub> station



## Fixed foam fire ext. system



## Nitrogen battery









# **FIRE CONTROL SIGNS**

## According to IMO A.1116(30) and ISO 24409-2

#### Fire control plan



FC0001 150x150 mm ISSA 4756001 IMPA 336001

## Safety Plan



FC0002 150x150 mm ISSA 4754132 IMPA 334132

## Fire and safety plan



FC0003 150x150 mm ISSA 4756013 IMPA 336013

## Remote vent. shut-off accom.



FC0005 150x150 mm ISSA 4756778 IMPA 336778

## Remote vent. shut-off mach'n spaces



FC0006 150x150 mm ISSA 4756779 IMPA 336779

## Remote vent. shut-off cargo spaces



FC0007 150x150 mm ISSA 4756780 IMPA 336780

## Remote ventilaton shutoff



FC0008 150x150 mm ISSA 4756078 IMPA 336078

## Remote control for skylight



FC0010 150x150 mm ISSA 4756781 IMPA 336781

## Remote control for watertight doors



FC0011 150x150 mm ISSA 4756782 IMPA 336782

#### Remote control for fire doors



FC0012 150x150 mm ISSA 4756783 IMPA 336783

## Fire damper accommodation



FC0015 150x150 mm ISSA 4756784 IMPA 336784

## Fire damper machinery space



FC0016 150x150 mm ISSA 4756785 IMPA 336785

## Fire damper cargo space



FC0017 150x150 mm ISSA 4756786 IMPA 336786

## Rmt. control fire dampers accom.



FC0019 150x150 mm ISSA 4756790 IMPA 336790

## Rmt. control fire dampers mach'n space



FC0020 150x150 mm ISSA 4756791 IMPA 336791

## Rmt. control fire dampers cargo space



FC0021 150x150 mm ISSA 4756792 IMPA 336792

## Closing device ventilation accom.



FC0023 150x150 mm ISSA 4756787 IMPA 336787

## Closing device vent. mach'n spaces



FC0024 150x150 mm ISSA 4756788 IMPA 336788

## Closing device ventilation cargo spaces



FC0025 150x150 mm ISSA 4756789 IMPA 336789

## Rmt. control cl. device accom.



FC0027 150x150 mm ISSA 4756793 IMPA 336793

## Rmt. control cl. device mach'n spaces



FC0028 150x150 mm ISSA 4756794 IMPA 336794

## Rmt. control cl. device cargo spaces



FC0029 150x150 mm ISSA 4756795 IMPA 336795

## Remote control fire pumps



FC0032 150x150 mm ISSA 4756797 IMPA 336797

## Fire pump



FC0033 150x150 mm ISSA 4756060 IMPA 336060

## Remote control emergency fire pump



FC0034 150x150 mm ISSA 4756799 IMPA 336799

### Emergency fire pump



FC0035 150x150 mm ISSA 4756019 IMPA 336019

## Remote shut-off fuel pumps



FC0036 150x150 mm ISSA 4756801 IMPA 336801

# Remote shut-off lube oil pumps



FC0037 150x150 mm ISSA 4756802 IMPA 336802

## **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

Standard size signs made of Pet-X material are all on stock and directly available. Each of the signs in this catalog are available in multiple different types of materials:

• Pet-X (PVC-free, the environment-friendly choice)

• Retro-Reflective

• Aluminum light

• PVC

• Transparant Vinyl

• White, self-adhesive vinyl (non-reflective)

Non-standard sizes and materials other than the standard Pet-X material are available upon request. See page 83 for more information.

# **FIRE CONTROL SIGNS**

# According to IMO A.1116(30) and ISO 24409-2

## Remote control bilge pump(s)



FC0038 150x150 mm ISSA 4756803 IMPA 336803

## Remote control emergency bilge pump



FC0039 150x150 mm ISSA 4756804 IMPA 336804

## Remote control fuel oil valves



FC0042 150x150 mm ISSA 4756805 IMPA 336805

## Remote control lube oil valves



FC0043 150x150 mm ISSA 4756806 IMPA 336806

## Remote control for fire pump valves



FC0044 150x150 mm ISSA 4756807 IMPA 336807

## International shore connection



FC0047 150x150 mm ISSA 4756059 IMPA 336059

## Fire hydrant



FC0048 150x150 mm 50x50 mm ISSA 4756815 IMPA 336815

## Fire main section valve



FC0049 150x150 mm ISSA 4756818 IMPA 336818

## Sprinkler section valve



FC0050 150x150 mm ISSA 4756819 IMPA 336819

#### Powder section valve



FC0051 150x150 mm ISSA 4756817 IMPA 336817

#### Foam section valve



FC0052 150x150 mm ISSA 4756816 IMPA 336816

## Drenching section valve



FC0053 150x150 mm ISSA 4756029 IMPA 336029

## Watermist section valve



FC0054 150x150 mm

## CO<sub>2</sub> section valve



FC0055 150x150 mm

## High expansion foam supply trunk



FC0056 150x150 mm ISSA 4756838 IMPA 336838

## Water spray system valves



FC0057 150x150 mm ISSA 4756027 IMPA 336027





### **FIRE CONTROL SIGNS**

### According to IMO A.1116(30) and ISO 24409-2

#### Space protected by CO<sub>2</sub> system



FC0060 150x150 mm ISSA 4756007 IMPA 336007

#### Space protected by nitrogen system



FC0061 150x150 mm ISSA 4756877 IMPA 336877

#### Space protected by foam system



FC0062 150x150 mm ISSA 4756016 IMPA 336016

#### Space protected by halon system



FC0063 150x150 mm ISSA 4756011 IMPA 336011

#### Space protected by inergen system



FC0064 150x150 mm

#### Space protected by aerosol system



FC0065 150x150 mm

#### Space protected by NOVEC system



FC0066 150x150 mm

#### Space protected by powder system



FC0068 150x150 mm

#### Space protected by water system



FC0069 150x150 mm

#### Space protected by watermist system



FC0070 150x150 mm

#### Space protected by sprinkler system



FC0071 150x150 mm ISSA 4756045 IMPA 336045

#### Space prot. by drenching/deluge system



FC0072 150x150 mm ISSA 4756028 IMPA 336028

#### Space protected by Hi Fog system



FC0073 150x150 mm

#### **Emergency generator**



FC0076 150x150 mm ISSA 4756076 IMPA 336076

#### Emergency battery



FC0077 150x150 mm ISSA 4756887 IMPA 336887

#### Emergency switchboard



FC0078 150x150 mm ISSA 4756077 IMPA 336077

#### Breathing air compressor



FC0079 150x150 mm ISSA 4756869 IMPA 336869

#### Fire alarm panel



FC0080 150x150 mm ISSA 4756043 IMPA 336870

#### Fire hydrant foam



FC0081 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

### **FIRE CONTROL SIGNS**

ISO 17631

These fire control signs are not mentioned in the IMO A.1116(30) and ISO 24409-2 but can be used onboard vessels build both before 2019 and from 2019.

#### A-class division



FC2001 150x150 mm ISSA 4756031 IMPA 336031

#### **B**-class division



FC2002 150x150 mm ISSA 4756037 IMPA 336037

#### A-class hinged fire door



FC2003 150x150 mm ISSA 4756032 IMPA 336032

#### B-class hinged fire door



FC2004 150x150 mm ISSA 4756038 IMPA 336038

#### A-class hinged self closing fire door



FC2005 150x150 mm ISSA 4754033 IMPA 336033

#### B-class hinged self closing fire door



FC2006 150x150 mm ISSA 4756039 IMPA 336039

#### A-class sliding fire door



FC2007 150x150 mm ISSA 4756034 IMPA 336034

#### B-class sliding fire door



FC2008 150x150 mm ISSA 4756040 IMPA 336040

#### A-class self closing sliding fire door



FC2009 150x150 mm ISSA 4756035 IMPA 336035

#### B-class self closing sliding fire door



FC2010 150x150 mm ISSA 4756041 IMPA 336041

#### Main vertical zone division



FC2125 150x150 mm ISSA 4756753 IMPA 336753

#### Main vertical zone



FC2126 150x150 mm ISSA 4756042 IMPA 336042

#### "A" Watertight fire door



FC2127 150x150 mm ISSA 4756755 IMPA 336755

#### "A" Semi-watertight fire door



FC2128 150x150 mm ISSA 4756756 IMPA 336756

#### "B" Watertight fire door



FC2129 150x150 mm ISSA 4756758 IMPA 336758

"B" Semi-watertight fire door



FC2130 150x150 mm ISSA 4756759 IMPA 336759

### "A" Self closing watertight fire door



FC2131 150x150 mm ISSA 4756761 IMPA 336761

#### "A" Self closing semi-watertight fire door



FC2132 150x150 mm ISSA 4756762 IMPA 336762

### "B" Self closing watertight fire door



FC2133 150x150 mm ISSA 4756764 IMPA 336764

"B" Self closing semi-watertight fire door



FC2134 150x150 mm ISSA 4756765 IMPA 336765

#### "A" Watertight sliding fire door



FC2135 150x150 mm ISSA 4756767 IMPA 336767

#### "A" Semi-watertight sliding fire door



FC2136 150x150 mm ISSA 4756768 IMPA 336768

#### "B" Watertight sliding fire door



FC2137 150x150 mm ISSA 4756770 IMPA 336770

#### "B" Semi-watertight sliding fire door



FC2138 150x150 mm ISSA 4756771 IMPA 336771

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



### FIRE CONTROL SIGNS

ISO 17631

These fire control signs are not mentioned in the IMO A.1116(30) and ISO 24409-2 but can be used onboard vessels build both before 2019 and from 2019.

#### "A" Self closing sl watertight fire door



FC2139 150x150 mm ISSA 4756773 IMPA 336773

#### "A" Self cl. sl. semi-watertight fire door



FC2140 150x150 mm ISSA 4756774 IMPA 336774

#### "B" Self closing sl watertight fire door



FC2141 150x150 mm ISSA 4756776 IMPA 336776

#### "B" Self cl. sl. semi-watertight fire door



FC2142 150x150 mm ISSA 4756777 IMPA 336777

#### Fire axe



FC2072 150x150 mm ISSA 4756026 IMPA 336026

#### Smoke detector



FC2073 150x150 mm ISSA 4756056 IMPA 336056

#### Heat detector



FC2074 150x150 mm ISSA 4756061 IMPA 336061

#### Flame detector



FC2075 150x150 mm ISSA 4756875 IMPA 336875

#### Gas detector



FC2076 150x150 mm ISSA 4756062 IMPA 336062

#### Heat and smoke detector



FC2077 150x150 mm

#### Spare charges fire extinguisher



FC2078 150x150 mm ISSA 4756715 IMPA 336715

### Refills fire extinguisher



FC2079 150x150 mm

### Bilge pump



FC2090 150x150 mm ISSA 4756021 IMPA 336021

#### Emergency bilge pump



FC2091 150x150 mm ISSA 4756022 IMPA 336022

### Locker breathing apparatus



FC2092 150x150 mm ISSA 4756068 IMPA 336068

### FIRE CONTROL SIGNS

According to IMO A.1116(30) the signs of this page are only for use onboard vessels build before 2019.

#### Remote release station CO2



FC2012 150x150 mm ISSA 4756808 IMPA 336808

#### Remote release station nitrogen



FC2013 150x150 mm ISSA 4756809 IMPA 336809

#### Remote release station halon



FC2014 150x150 mm ISSA 4756810 IMPA 336810

#### Remote release station powder



FC2015 150x150 mm ISSA 4756812 IMPA 336812

#### Remote release station water



FC2016 150x150 mm ISSA 4756813 IMPA 336813

#### Remote release station foam



FC2017 150x150 mm ISSA 4756811 IMPA 336811

#### Remote release station inergen



FC2018 150x150 mm ISSA 4756808 IMPA 336808

#### Remote release station aerosol



FC2019 150x150 mm

#### Fixed fire ext. inst. CO2



FC2021 150x150 mm ISSA 4756820 IMPA 336820

#### Fixed fire ext. inst. nitrogen



FC2022 150x150 mm ISSA 4756821 IMPA 336821

#### Fixed fire ext. inst. foam



FC2023 150x150 mm ISSA 4756823 IMPA 336823

#### Fixed fire ext. inst. halon



FC2024 150x150 mm ISSA 4756822 IMPA 336822

#### Fixed fire ext. inst. powder



FC2025 150x150 mm ISSA 4756824 IMPA 336824

#### fixed fire ext. inst. water



FC2026 150x150 mm ISSA 4756825 IMPA 336825

#### Extinguishing battery CO2



FC2027 150x150 mm ISSA 4756826 IMPA 336826

#### Extinguishing battery nitrogen



FC2028 150x150 mm ISSA 4756827 IMPA 336827

### Extinguishing battery foam



FC2029 150x150 mm ISSA 4756829 IMPA 336829

### Extinguishing battery halon



FC2030 150x150 mm ISSA 4756828 IMPA 336828

### Extinguishing battery powder



FC2031 150x150 mm ISSA 4756830 IMPA 336830

Extinguishing battery water



FC2032 150x150 mm ISSA 4756831 IMPA 336831

### Extinguishing battery inergen



FC2033 150x150 mm ISSA 4756826 IMPA 336826

#### Extinguishing battery aerosol



FC2034 150x150 mm

#### Protected ext. bottle CO2



FC2036 150x150 mm ISSA 4756832 IMPA 336832

#### Protected ext. bottle nitrogen



FC2037 150x150 mm ISSA 4756833 IMPA 336833

#### Protected ext. bottle foam



FC2038 150x150 mm ISSA 4756835 IMPA 336835

#### Protected ext. bottle halon



FC2039 150x150 mm ISSA 4756834 IMPA 336834

### Protected ext. bottle powder



FC2040 150x150 mm ISSA 4756836 IMPA 336836

#### Protected ext. bottle water



FC2041 150x150 mm ISSA 4756837 IMPA 336837



### FIRE CONTROL SIGNS

According to IMO A.1116(30) the signs of this page are only for use onboard vessels build before 2019.

#### Protected ext. bottle aerosol



FC2042 150x150 mm

#### Foam monitor



FC2044 150x150 mm ISSA 4756841 IMPA 336841

#### Powder monitor



FC2045 150x150 mm ISSA 4756842 IMPA 336842

#### Water monitor



FC2046 150x150 mm ISSA 4756843 IMPA 336843

#### Hose reel foam



FC2047 150x150 mm ISSA 4756844 IMPA 336844

#### Hose reel powder



FC2048 150x150 mm ISSA 4756845 IMPA 336845

#### Hose reel water



FC2049 150x150 mm ISSA 4756846 IMPA 336846

#### CO2 fire extinguisher



FC2050 150x150 mm ISSA 4756847 IMPA 336847

#### Powder fire extinguisher



FC2051 150x150 mm ISSA 4756850 IMPA 336850

#### Foam fire extinguisher



FC2052 150x150 mm ISSA 4756849 IMPA 336849

#### Halon fire extinguisher



FC2053 150x150 mm ISSA 4756848 IMPA 336848

#### Water fire extinguisher



FC2054 150x150 mm ISSA 4756851 IMPA 336851

#### Light water fire extinguisher



FC2055 150x150 mm ISSA 4756080 IMPA 336080

#### Water mist fire extinguisher



FC2056 150x150 mm

#### Wet chemical fire extinguisher



FC2057 150x150 mm

#### CO<sub>2</sub> wheeled fire extinguisher



FC2060 150x150 mm ISSA 4756852 IMPA 336852

### Foam wheeled fire extinguisher



FC2061 150x150 mm ISSA 4756854 IMPA 336854

### Halon wheeled fire extinguisher



FC2062 150x150 mm ISSA 4756853 IMPA 336853

#### Powder wheeled fire extinguisher



FC2063 150x150 mm ISSA 4756855 IMPA 336855

### Water wheeled fire extinguisher



FC2064 150x150 mm ISSA 4756856 IMPA 336856

### Portable foam applicator



FC2066 150x150 mm ISSA 4756857 IMPA 336857

### Water fog applicator



FC2067 150x150 mm ISSA 4756885 IMPA 336885

#### General alarm button or switch



FC2070 150x150 mm ISSA 4756022 IMPA 336002

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

### FIRE CONTROL SIGNS

According to IMO A.1116(30) the signs of this page are only for use onboard vessels build before 2019.

#### Control station



FC2080 150x150 mm ISSA 4756066 IMPA 336066

#### Fire station



FC2081 150x150 mm ISSA 4756030 IMPA 336030

#### Fire equipment



FC2082 150x150 mm ISSA 4756067 IMPA 336067

#### Fire locker



FC2083 150x150 mm ISSA 4756858 IMPA 336858

#### Inert gas installation



FC2084 150x150 mm ISSA 4756073 IMPA 336073

#### Safety equipment



FC2085 150x150 mm

#### Heli equipment



FC2086 150x150 mm

#### Sprinkler



FC2094 150x150 mm ISSA 4756045 IMPA 336045

#### Rmt. controlled fuel/lub. oil valves



FC2095 150x150 mm ISSA 4756065 IMPA 336065

#### CO<sub>2</sub> release station



FC2097 150x150 mm ISSA 4756009 IMPA 336009

#### Halon release station



FC2098 150x150 mm ISSA 4756049 IMPA 336049

#### Hose box with spray / jet



FC2099 150x150 mm ISSA 4756058 IMPA 336058

#### Locker with add'l protective clothing



FC2100 150x150 mm ISSA 4756069 IMPA 336069

#### Rmt. contrll. fire pump or emergency sw



FC2101 150x150 mm ISSA 4756020 IMPA 336020

#### Fire main with valves



FC2102 150x150 mm ISSA 4756057 IMPA 336057

#### Space protected by automatic fire alarm



FC2103 150x150 mm ISSA 4756006 IMPA 335606

### Emergency telephone station



FC2104 150x150 mm ISSA 4756025 IMPA 336025

#### Foam nozzle



FC2105 150x150 mm ISSA 4756015 IMPA 336015

#### Sprinkler installation



FC2106 150x150 mm ISSA 4756044 IMPA 336044

Manual call point



FC2107 150x150 mm ISSA 4756005 IMPA 336005

#### Monitored by detector



FC2108 150x150 mm ISSA 4756055 IMPA 336055

#### Wet chemical applicator



FC2109 150x150 mm

#### Emergency light



FC2111 150x150 mm

#### Battery 24V



FC2112 150x150 mm

### Space protected by foam



FC2113 150x150 mm ISSA 4756016 IMPA 336016

#### Sprinkler horn



FC2114 150x150 mm ISSA 4756046 IMPA 336046

### Remote control skylights



FC2115 150x150 mm ISSA 4756064 IMPA 336064

#### Powder installation



FC2116 150x150 mm ISSA 4756051 IMPA 336051



# FIRE CONTROL SIGNS

According to IMO A.1116(30) the signs of this page are only for use onboard vessels build before 2019.

#### Powder release station



FC2117 150x150 mm ISSA 4756054 IMPA 336054

#### Foam release station



FC2118 150x150 mm ISSA 4756018 IMPA 336018

#### Foam valve



FC2119 150x150 mm ISSA 4756017 IMPA 336017

#### High exp. foam suppl. trunk



FC2120 150x150 mm ISSA 4756074 IMPA 336074

#### Foam installation



FC2121 150x150 mm ISSA 4756013 IMPA 336013

#### Closing applce ext. vent. in/out



FC2122 150x150 mm ISSA 4756072 IMPA 336072

#### Fire damper in vent duct



FC2123 150x150 mm ISSA 4756063 IMPA 336063

#### Fire alarm



FC2148 150x150 mm ISSA 4756004 IMPA 336004

FC2149

150x150 mm

ISSA 4756003

IMPA 336003



Fire alarm horn

Alarm horn CO2 system



FC2150 150x150 mm ISSA 4756008 IMPA 336008

#### Alarm horn nitrogen system



FC2151 150x150 mm

#### Alarm horn foam system



FC2152 150x150 mm

### Alarm horn powder system



FC2153 150x150 mm

### Alarm horn inergen system



FC2154 150x150 mm



FC2155 150x150 mm

#### Alarm horn aerosol system



FC2156 150x150 mm

#### Alarm horn drenching system



FC2157 150x150 mm

#### Alarm horn watermist system



FC2158 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

### WARNING SIGNS

#### General warning sign



WS0001 150x150 mm ISSA 4757500 IMPA 337500

#### Flammable material



WS0002 150x150 mm ISSA 4757509 IMPA 337509

#### Explosive material



WS0003 150x150 mm ISSA 4757504 IMPA 337504

#### Toxic material



WS0004 150x150 mm ISSA 4757506 IMPA 337506

#### Corrosive substance



WS0005 150x150 mm ISSA 4757505 IMPA 337505

#### Oxidising substance

WS0006 150x150 mm

### Substance with environmental hazard



WS0007 150x150 mm

#### Long term health hazard



WS0008 150x150 mm

ISSA 4757507 IMPA 337507

#### Electricity



WS0009 150x150 mm ISSA 4757507 IMPA 337507

#### Radioactive material or ionizing radiation



WS0010 150x150 mm ISSA 4757511 IMPA 337511

#### Biological hazard



WS0011 150x150 mm ISSA 4757501 IMPA 337501

#### Low temperature / freezing conditions



WS0012

#### Hot surface



WS0013

#### Overhead load



WS0015 150x150 mm

#### Industrial vehicles



WS0016 150x150 mm ISSA 4757503 IMPA 337503

#### Automatic start-up



WS0017 150x150 mm

#### Run over by remote operator controlled machine



WS0018 150x150 mm

#### Pressurized cylinder



WS0019 150x150 mm

### Battery charging



WS0020 150x150 mm

#### Non-ionizing radiation



WS0021 150x150 mm ISSA 4757515 IMPA 337515

#### N. (2000)



WS0023 150x150 mm

### Laser beam



WS0022 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



# WARNING SIGNS

Magnetic field



WS0024 150x150 mm

#### Aspyxiation atmosphere



WS0025 150x150 mm

#### Sudden loud noise



WS0026 150x150 mm

#### Arc flash



WS0027 150x150 mm

#### Floor level obstacle



WS0029 150x150 mm ISSA 4757508 IMPA 337508

#### Drop (fall)



WS0030 150x150 mm

#### Slippery surface



WS0031 150x150 mm ISSA 4757501 IMPA 337501

#### Overhead obstacle



WS0032 150x150 mm ISSA 4757502 IMPA 337502

#### Crushing



WS0033

#### Crushing of hands



WS0034

#### Sharp element



WS0035 150x150 mm

#### Counterrotating rollers



WS0036 150x150 mm

#### Hand crushing between press brake tool



WS0037 150x150 mm

#### Hand crushing between press brake and material



WS0038 150x150 mm

#### Rapid movement of workpiece in press brake



WS0039 150x150 mm

### Barbed wire



WS0043 150x150 mm

#### Guard dog



WS0044 150x150 mm

#### Bull



WS0045 150x150 mm

#### Crocodiles, alligators or caymans



WS0046 150x150 mm

#### Falling objects



WS0047 150x150 mm

#### Falling ice



WS0048 150x150 mm

#### Fragile roof



WS0049 150x150 mm

#### Quicksand or mud / deep mud or silt



WS0050 150x150 mm

#### Deep water



WS0051 150x150 mm

#### Shallow water (diving)



WS0052 150x150 mm

#### Unprotected edge



WS0053 150x150 mm

#### Unstable cliff edge



WS0054 150x150 mm

#### Unstable cliff



WS0055 150x150 mm

### Strong winds



WS0056 150x150 mm

#### Step down



WS0057 150x150 mm

### Long term health hazard



WS0058 150x150 mm

#### Environmental hazard



WS0059 150x150 mm

### **WARNING SIGNS**

#### Hot liquids



WS1001 150x150 mm

#### Dangerous stairs



WS1002 150x150 mm

#### Rotating cutter



WS1003 150x150 mm

### Rotating parts / belts and tires



WS1004 150x150 mm

#### Rotating gearing wheels



WS1005 150x150 mm

#### Camera surveillance



WS1006 150x150 mm

#### EX zone



WS1010 150x150 mm

#### H<sub>2</sub>S



WS1011 150x150 mm

#### Harmfull / irritant materials



WS1012 150x150 mm

#### Confined space



WS1013 150x150 mm

#### Hot steam under pressure



WS1014 150x150 mm

#### High pressure water jets



WS1015 150x150 mm

#### Space with high temperature



WS1016 150x150 mm

### Moving machinery



Lack of oxygen

WS2001 150x200 mm ISSA 4757546 IMPA 337546

WS2005

150x200 mm

ISSA 4757544

IMPA 337544

#### Gas under pressure



WS2002 150x200 mm

# Explosive atmosphere



WS2006 150x200 mm

#### Poison gas



WS2003 150x200 mm

### DANGER





DANGER

High noise levels

WS2008 150x200 mm ISSA 4757540 IMPA 337540

WS2004 150x200 mm

#### Co<sub>2</sub> protected area



DANGER

WS2009 150x200 mm ISSA 4757545 IMPA 337545

#### Starts/stops automatically



WS2010 150x200 mm ISSA 4757557 IMPA 337557

#### Wet deck



WS2011 150x200 mm ISSA 4757573 IMPA 337573

### High voltage



WS2012 150x200 mm ISSA 4757610 IMPA 337610

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



### **WARNING SIGNS**

#### Electrical hazard



WS2013 150x200 mm ISSA 4757611 IMPA 337611

#### Explosion risk



WS2014 150x200 mm ISSA 4757581 IMPA 337581

#### Unmanned machinery



WS2015 150x200 mm ISSA 4757542 IMPA 337542

### Battery charching



WS2016 150x200 mm ISSA 4757543 IMPA 337543

#### Low oxygen level



WS2017 150x200 mm ISSA 4757544 IMPA 337544

#### Under maintenance



WS2018 150x200 mm ISSA 4757547 IMPA 337547

#### Overhead working



WS2019 150x200 mm ISSA 4757548 IMPA 337548

#### Out of order



WS2020 150x200 mm ISSA 4757566 IMPA 337566

#### Slip hazard



WS2021 150x200 mm ISSA 4757572 IMPA 337572

#### Slippery surface



WS2022 150x200 mm ISSA 4757574 IMPA 337574

### Mind your head



WS2023 150x200 mm ISSA 4757570 IMPA 337570

#### mm 🔼



Petroleum vapour

WS2024 150x200 mm ISSA 4757580 IMPA 337580

#### Explosive gasses



WS2025 150x200 mm ISSA 4757582 IMPA 337582

#### Battery acid



WS2026 150x200 mm ISSA 4757591 IMPA 337591

### CAUTION

#### Corrosive substance



Harmful vapours

WS2027 150x200 mm ISSA 4757596 IMPA 337596

#### Caustic



WS2028 150x200 mm ISSA 4757597 IMPA 337597

#### Toxic



WS2029 150x200 mm ISSA 4757600 IMPA 337600

#### Chlorine



WS2030 150x200 mm ISSA 4757601 IMPA 337601

#### orine



WS2031 150x200 mm ISSA 4757604 IMPA 337604

#### 380 Volts



WS2032 150x200 mm ISSA 4757615 IMPA 337615



### **WARNING SIGNS**

#### 440 Volts



WS2033 150x200 mm ISSA 4757614 IMPA 337614

#### 3300 Volts



WS2034 150x200 mm ISSA 4757625 IMPA 337625

#### Trip hazard



WS2035 150x200 mm ISSA 4757620 IMPA 337620

#### Mind the step



WS2036 150x200 mm ISSA 4757623 IMPA 337623

#### Uneven surface



WS2037 150x200 mm ISSA 4757629 IMPA 337629

#### Flammable liquid



WS2038 150x200 mm ISSA 4757631 IMPA 337631

Fire risk



WS2039 150x200 mm ISSA 4757630 IMPA 337630

#### Low flash point



WS2040 150x200 mm ISSA 4757636 IMPA 337636

#### Loud noise



WS2041 150x200 mm ISSA 4757650 IMPA 337650

#### Radiation risk



WS2042 150x200 mm ISSA 4757660 IMPA 337660



WS2043 150x200 mm ISSA 4757670 IMPA 337670

### Biological hazard



WS2044 150x200 mm ISSA 4757680 IMPA 337680

#### Danger of infection



WS2045 150x200 mm ISSA 4757681 IMPA 337681

#### Non-ionising radiation



WS2046 150x200 mm IMPA 337673



ISSA 4757673

### Danger of death



WS2047 150x200 mm ISSA 4757688 IMPA 337688

#### Compressed oxygen



WS2048 150x200 mm ISSA 4757585 IMPA 337585

#### Open slowly



WS2049 150x200 mm ISSA 4757541 IMPA 337541

#### Compressed gasses



WS2050 150x200 mm ISSA 4757584 IMPA 334050



WS2051 150x200 mm

Danger automatic sliding door

# Danger explosion risk



WS2052 150×200 mm

### Space with high temperature



WS2053 150x200 mm

#### Acetylene



WS5001 300x100 mm ISSA 4757701 IMPA 337701

### Oxygen



WS5002 300x100 mm ISSA 4757700 IMPA 337700

### Solvents



WS5003 300x100 mm

#### **ALL OTHER COMBINATIONS WITH TEXTS ON REQUEST**

Give the symbol code, for example WS0001. Than choose your desired language or combination. Multiple languages are also possible.







### **PROHIBITION SIGNS**

#### General prohibition sign



PS0001 150x150 mm

#### No smoking



PS0002 150x150 mm ISSA 4758500 IMPA 338500

#### No open flame or fire



PS0003 150x150 mm ISSA 4758501 IMPA 338501

#### No thoroughfare



PS0004 150x150 mm ISSA 4758503 IMPA 338503

#### Do not extuinguish with water



PS0005 150x150 mm ISSA 4758509 IMPA 338509

#### No drinking water



PS0006 150x150 mm ISSA 4758505 IMPA 338505

#### No access for unauthorized



PS0007 150x150 mm ISSA 4758502 IMPA 338502

#### No access for industrial vehicles



PS0009

#### Do not touch



PS0010 150x150 mm ISSA 4758504 IMPA 338504

#### No metallic articles or watches



PS0011 150x150 mm

#### Do not alter the state of the switch



PSO012 150x150 mm ISSA 4758553 IMPA 338553

#### Do not obstruct



PS0013 150x150 mm

#### No activated mobile phone



PSO014 150x150 mm ISSA 4758510 IMPA 338510

#### No eating or drinking



PS0015 150x150 mm ISSA 4758566 IMPA 338566

#### No climbing



PS0016 150x150 mm

#### No access with impl. cardiac devices



PS0017 150x150 mm

#### No access metallic implants



PS0018 150x150 mm

#### No reaching in



PS0019 150x150 mm

#### No heavy load



PS0020 150x150 mm

#### No photography



PSO021 150x150 mm ISSA 4758692 IMPA 338692

#### Do not spray with water



PS0022 150x150 mm

#### No pushing



PS0023 150x150 mm

#### No sitting



PS0024 150x150 mm

#### No stepping on surface



PS0025 150x150 mm

#### Do not use lift in case of fire



PS0026 150x150 mm ISSA 4756300 IMPA 336300

#### No dogs



PS0027 150x150 mm

#### Do not walk or stand here



PS0028 150x150 mm

#### Do not use this incomplete scaffold



PS0030 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

# **PROHIBITION SIGNS**

#### Do not use device into water



PS0031 150x150 mm

#### Do not use this lift for people



PS0032 150x150 mm

#### Do not wear gloves



PS0033 150x150 mm

### Do not tie knots in rope



PS0034 150x150 mm

#### Do not use for face grinding



PS0035 150x150 mm

#### Do not use for wet grinding



PS0036 150x150 mm

#### Do not use with hand-held grinding machine



PS0037 150x150 mm

#### Do not wear metall-studded footwear



PS0038 150x150 mm

#### No children allowed



PS0039 150x150 mm

#### Hot works prohibited



PS0040 150x150 mm

#### Do not set off fireworks



PS0041 150x150 mm

#### No leaning against



PS0042 150x150 mm

#### Not for pregnant women



PS0043 150x150 mm

### Not for people in state of intoxication



PS0044 150x150 mm

### Use of smart glasses prohibited



PS0045 150x150 mm

#### No running



PS0046 150x150 mm

#### No swimming



PS0047 150x150 mm

#### No snorkelling



PS0048 150x150 mm

#### No diving



PS0049 150x150 mm

No outdoor footwear



PS0050 150x150 mm







### **PROHIBITION SIGNS**

No jumping into water



PS0051 150x150 mm

#### No pushing into water



PS0052 150x150 mm

#### Do not expose to direct sunlight or hot surface



PS0053 150x150 mm

#### Not to be serviced by users



PS0054 150x150 mm

Do not put finger into the nozzle



PS0055 150x150 mm

#### Do not cross barrier



PS0056 150x150 mm

#### No jumping down



PS0057 150x150 mm

#### Do not ride with people



PS0201 150x150 mm

#### Do not flash



PS0202 150x150 mm

#### Do not touch, device under voltage



PS0203 150x150 mm

#### No smoking articles



PS0204 150x150 mm

#### No ties



PS0205 150x150 mm

#### No jewelry



PS0206 150x150 mm

#### Do not unplug



PS0207 150x150 mm

#### No bicycles



PS0208 150x150 mm

#### Do not park



PS0209 150x150 mm

1 8 6 8

5

#### No drugs and alcohol



PS0210 150x150 mm

#### No work clothes



PSO211 150x150 mm

#### Wearing of helm prohibited



PS0212 150x150 mm

### No weapons



PS0213 150x150 mm ISSA 4752419 IMPA 332419

#### Do not open the valve of gas cylinder



PS0214 150x150 mm

#### No smoking



PS0215 150x150 mm

#### Do not use lift in case of fire



PS2001 150x200 mm

#### Do not use this lift for people



PS2002 150x200 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

### PROHIBITION SIGNS

#### No smoking



PS5001 300x100 mm

#### Discharge of oil prohibited



PS5005 300x100 mm

#### Restricted area



PS5009 ISPS027 300x100 mm

IMPA 338690

#### Smoking forbidden



PS5013 ISSA 4758531 300x100 mm IMPA 338531

#### No matches



PS5017 ISSA 4758534 300x100 mm IMPA 338534

#### No entry



PS5021 ISSA 4758540 300x100 mm IMPA 338540

#### Do not enter pumproom



PS5025 ISSA 4758546 300x100 mm IMPA 338546

#### Switch off mobile devices



PS5002 300x100 mm

#### Restricted area



Restricted area authorised personnel only

PS5006 300x100 mm

#### No photography



PS5010 300×100 mm

#### No smoking area



PS5014 ISSA 4758532 300x100 mm IMPA 338532

#### No naked light



No naked light

PS5018 ISSA 4758536 300x100 mm IMPA 338536

Crew only



PS5022 300x100 mm

#### No entry...



PS5026 ISSA 4758547 300x100 mm IMPA 338547

#### No smoking in bed



PS5003 300x100 mm

#### Restricted area



Restricted area no authorised access

ISSA 4756300

IMPA 336300

PS5007 300x100 mm

Microwave oven



PS5011 ISSA 4758618 300x100 mm IMPA 338618

#### No smoking beyond this point



No smoking beyond this point

PS5015 ISSA 4758533 300x100 mm IMPA 338533

#### No naked flames



No naked flames

ISSA 4758537 PS5019 300x100 mm IMPA 338537

#### No access to car



No access to car deck while vessel is at sea

PS5023 ISSA 4758541 300x100 mm IMPA 338541

#### No admittance



PS5027 ISSA 4758549 300x100 mm IMPA 338549

#### Do not drink



PS5004 300x100 mm

#### No entry please wait



No entry please wait for attendance

PS5008 300x100 mm

#### Do not use elevator...



Do not use elevator in case of fire

PS5012 PS017

300x100 mm

No smoking in elevator



PS5016 ISSA 4758575 300x100 mm IMPA 338575

#### No hot work



No hot work

PS5020 ISSA 4758539 300x100 mm IMPA 338539

#### Do not enter



PS5024 ISSA 4758542 300x100 mm IMPA 338542

### No access



PS5028 ISSA 4758557 300x100 mm IMPA 338557

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



### PROHIBITION SIGNS

#### Authorised personnel only



**Authorised** ersonnel only

PS5029 300x100 mm

ISSA 4758545 IMPA 338545

#### No entry unauth, pers



No entry to unauthorised personnel

PS5030 300x100 mm ISSA 4758544 IMPA 338544

#### Restricted area...



PS5031 300x100 mm

ISSA 4758691 IMPA 338691

#### Restricted area...



PS5033 300x100 mm

#### Restricted area...



Restricted area Controlled area

PS5034 300x100 mm

#### Restricted area...



Restricted area Limited area

PS5035 300x100 mm

#### Do not touch



Do not touch

PS5036 300x100 mm ISSA 4758548 IMPA 338548

#### Do not drink



Do not drink

PS5037 300x100 mm ISSA 4758550 IMPA 338550

# Do not operate



Do not operate

PS5038 ISSA 4758553 300x100 mm IMPA 338553

#### No workwear beyond this point



No workwear beyond this point

PS5039 300x100 mm ISSA 4758574 IMPA 338574

#### Unauth, persons may not...



Unauthorised persons may not service machines

PS5040 300x100 mm ISSA 4758555 IMPA 338555

#### Do not carry out main...



Do not carry out running machinery

PS5041 300×100 mm ISSA 4758556 IMPA 338556

### Do not extinguish with water



Do not extinguish with water

PS5042 300x100 mm ISSA 4758563 IMPA 338563

#### Do not switch on



Do not switch on

PS5043 300x100 mm ISSA 4758552 IMPA 338552

#### Do not switch off



Do not switch off

PS5044 300x100 mm ISSA 4758551 IMPA 338551

#### Do not touch, men working



Do not touch Men working

PS5045 300x100 mm ISSA 4758564 IMPA 338564

#### No exit



No exit

PS5046 300x100 mm

ISSA 4758543 IMPA 338543

#### Keep out



Keep out

PS5047 300x100 mm

ISSA 4758559 IMPA 338559

#### Do not open



Do not open

PS5048 300x100 mm

ISSA 4758560 IMPA 338560

#### Do not close



Do not close

PS5049 300x100 mm ISSA 4758561 IMPA 338561

### Do not watch the arc



Do not vatch the arc

PS5050 300x100 mm

ISSA 4758565 IMPA 338565

### Do not throw garbage



Do not throw arbage overboard

PS5051 300x100 mm

ISSA 4758567 IMPA 338567

#### Do not remove guards



PS5052

300x100 mm

Do not remove guards

ISSA 4758568

IMPA 338568

PS5053 300x100 mm

ISSA 4758569

IMPA 338569

# No smoking, drinking or eating



PS5054 300x100 mm IMPA 338566

ISSA 4758566

#### Do not pull handle



Do not pull handle, door opens automatically

PS5055 300x100 mm

# Do not use unless...



### **PROHIBITION SIGNS**

#### Drain opening do not cover/obstruct



**Drain opening** do not cover or obstruct

PS5101 600x240 mm

### Text drain opening do not cover/obstruct

# **Drain opening** do not cover or obstruct

PS5102 600x240 mm

#### No foreign articles into toilet



PS6001 150x200 mm

### No foreign articles into sea



PS6002

# 150x200 mm

### Do not smoke in bed



PS6003 150x200 mm



Do not drink

PS6004 150x200 mm

#### No smoking



PS6005 150x200 mm

#### No mobile phones



PS6006 150x200 mm



#### No access, crew only



PS6007 150x200 mm

### Crew only



PS6008 150x200 mm

#### Do not use elevator



PS 6050 150x150 mm

#### ALL SYMBOLS ARE AVAILABLE WITH ADDITIONAL TEXT









#### General mandatory



MS0001 150x150 mm ISSA 4755641 IMPA 335641

#### Refer to instruction manual



MS0002 150x150 mm

#### Wear ear protection



MS0003 150x150 mm ISSA 4755648 IMPA 335648

#### Wear eye protection



MS0004 150x150 mm ISSA 4755644 IMPA 335644

#### Wear head protection



MS0005 150x150 mm ISSA 4755642 IMPA 335642

#### Wear safety footwear



MS0006 150x150 mm ISSA 4755650 IMPA 335650

#### Wear protective gloves



MS0007 150x150 mm ISSA 4755649 IMPA 335649

#### Wear respiratory protection



MS0008 150x150 mm ISSA 4755647 IMPA 335647

#### Wear face shield



MS0009 150x150 mm ISSA 4755645 IMPA 335645

#### Wear protective clothing



MSO010 150x150 mm ISSA 4755651 IMPA 335651

#### Wear mask



MS0011 150x150 mm

#### Opaque eye protection must be worn



MS0012 150x150 mm

#### Wear safety harness



MSO013 150x150 mm ISSA 4755652 IMPA 335652

#### Wear high-visibility clothing



MS0014 150x150 mm

#### Wear welding mask



MS0015 150x150 mm

#### Wear anti-static footwear



MS0016 150x150 mm

#### Use self-contained breathing appliance



MS0017 150x150 mm

#### Connect an earth terminal



MS0018 150x150 mm

#### Disconnect mains plug from electrical outlet



MS0019 150x150 mm

#### Wash your hands



MS0020 150x150 mm

#### Use handrail



MS0021 150x150 mm

#### Use barrier cream



MS0022 150x150 mm

#### Use footbridge



MS0023 150x150 mm

### Disconnect before maintenance or repair



MS0024 150x150 mm

#### Wear safety belt



MS0025 150x150 mm ISSA 4755100 IMPA 335100

#### Use litter bin



MS0026 150x150 mm

#### Use gas detector



MS0027 150x150 mm

#### Use this walkway



MS0028 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

### **MANDATORY SIGNS**

#### Protect infant's eyes with opaque eye protection



MS0029 150x150 mm

#### Use protective apron



MS0030 150x150 mm

#### Check guard



MS0031 150x150 mm

#### Keep locked



MS0032 150x150 mm

#### Sound horn



MS0033 150x150 mm

#### Use table saw adjustable guard



MS0034 150x150 mm

#### Secure gas cylinders



MS0035 150x150 mm

#### Wear protective roller sport equipment



MS0036 150x150 mm

#### Close and secure hatches in launch sequence



MS0037 150x150 mm ISSA 4755101 IMPA 335101

#### Start engine in launch sequence



MS0038 150x150 mm ISSA 4755102 IMPA 335102

#### Lower lifeboat to water in launch sequence



MS0039 150x150 mm ISSA 4755103 IMPA 335103

#### Lower liferaft to water in launch sequence



MS0040 150x150 mm ISSA 4755104 IMPA 335104

#### Lower rescue boat to water in launch sequence



MS0041 150x150 mm ISSA 4755105 IMPA 335105

#### Release falls in launch sequence



MS0042 150x150 mm ISSA 4755106 IMPA 335106

#### Start water spray in launch sequence



MS0043 150x150 mm ISSA 4755107 IMPA 33510

#### Release lifeboat gripes in launch sequence



MS0044 150x150 mm ISSA 4755109 IMPA 335109

#### Start air supply in launch sequence



MS0045 150x150 mm ISSA 4755108 IMPA 335108

#### Wear personal flotation device



MS0046

#### Keep under supervision in aquatic environment



MS0047 150x150 mm

#### Wear laboratory coat



MS0048 150x150 mm

### Ensure continuous ventilation



MS0049

#### Ventilate before and during entering



MS0050 150x150 mm



### Entry only with supervisor outside



MS0051 150x150 mm





#### Wear full size safety goggles



MS0201 150x150 mm

#### Wear safety cap



MS0202 150x150 mm

#### Wear protective cap



MS0203 150x150 mm

#### Wear protective hairnet



MS0204 150x150 mm

#### Wear protective beardnet



MS0205 150x150 mm

#### Wear shoe covers



MS0206 150x150 mm

#### Wear safety helmet and faceshield



MS0209 150x150 mm

#### Use handrail right



MS0210 150x150 mm

#### Wear double ear protection



MS0212 150x150 mm

#### Keep escape breathing device with you



MS0213 150x150 mm

#### Keep tools lined up



MS0214 150x150 mm

#### Keep flashlight with you



MS0215 150x150 mm

#### Wear lifejacket



MS2001 150x200 mm

#### Wear goggles



MS2002 150x200 mm ISSA 4755715 IMPA 335715

#### Wear mask



MS2003 150x200 mm ISSA 4755719 IMPA 335719

#### Wear ear protection



MS2004 150x200 mm ISSA 4755722 IMPA 335722

#### Wear gloves



MS2005 150x200 mm ISSA 4755724 IMPA 335724

#### Wear protective clothing



MS2006 150x200 mm ISSA 4755726 IMPA 335726

Wear helmet



MS2007 150x200 mm ISSA 4755709 IMPA 335709

#### Hand wash only



MS2008 150x200 mm ISSA 4755737 IMPA 335737

#### Head protection



MS2009 150x200 mm ISSA 4755710 IMPA 335710

#### Safety helmet area



MS2010 150x200 mm ISSA 4755733 IMPA 335733

#### High visibility clothing must be worn



MS2011 150x200 mm ISSA 4755782 IMPA 335782

#### Hair covering



MS2012 150x200 mm ISSA 4755736 IMPA 335736

### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



#### Eye protection



MS2013 150x200 mm ISSA 4755712 IMPA 335712

#### Eye protection in this area



MS2014 150x200 mm ISSA 4755734 IMPA 335734

#### Eye protection is provided and must be worn



MS2015 150x200 mm ISSA 4755730 IMPA 335730

#### Wear face shield



MS2016 150x200 mm ISSA 4755716 IMPA 335716

#### Wear welding protection



MS2017 150×200 mm ISSA 4755735 IMPA 335735

#### Face protection in area



MS2018 150x200 mm ISSA 4755732 IMPA 335732

Wear mask



MS2019 150x200 mm ISSA 4755719 IMPA 335719

#### Wear respirator



MS2020 150x200 mm ISSA 4755731 IMPA 335731

#### Ear protection in area



MS2021 150x200 mm ISSA 4755721 IMPA 335721

#### Ear protection



MS2022 150x200 mm ISSA 4755723 IMPA 335723

#### Boots must be worn



MS2023 150x200 mm ISSA 4755725 IMPA 335725

#### Now wash your hands



MS2024 150x200 mm ISSA 4755728 IMPA 335728

#### Guards in position



MS2025 150x200 mm ISSA 4755729 IMPA 335729

#### Lifejackets must be worn



MS2026 150x200 mm ISSA 4755742 IMPA 335742

#### Lift correctly



MS2028 150x200 mm ISSA 4755727 IMPA 335727

#### Keep fire door free



MS2029 150x200 mm

#### Keep fire door closed and free



MS2030 150x200 mm

#### Keep closed at sea



MS2031 150x150 mm

#### Keep locked



MS2032 150x200 mm

#### Ensure continuous ventilation



MS2033 150x200 mm

#### Ventilate before and during entering



MS2034 150x200 mm

#### Entry only with supervisor outside



MS2035 150x200 mm

#### Secure hatches



MS2051 150x150 mm

#### Lower rescue boat



MS2052 150x150 mm

### Lower liferaft



MS2053 150x150 mm

#### Lower lifeboat



MS2054 150x150 mm

#### Release falls



MS2055 150x150 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



#### Watermist protected area



MS2401 150x200 mm

#### Hi-Fog protected area



MS2402 150x200 mm

#### CO<sub>2</sub> protected area



MS2403 150x200 mm ISSA 4755876 IMPA 335876

#### Novec 1230 protected area



MS2404 150x200 mm

#### STAT-X protected area



MS2405 150x200 mm

#### Sprinkler protected area



MS2406 150x200 mm

#### Adjust pressure



MS2501 150x200 mm ISSA 4755874 IMPA 335874

#### Secure painter



MS2502 150x200 mm ISSA 4755875 IMPA 335875

#### Keep shut



MS2503 150x200 mm ISSA 4755871 IMPA 335871

#### Keep clear



MS2504 150x200 mm ISSA 4755870 IMPA 335870

#### Utensil wash only



MS2505 150x200 mm ISSA 4755738 IMPA 335738

#### Door must be kept closed



MS2506 150x200 mm ISSA 4755872 IMPA 335872

#### Crew only



MS2507 150x200 mm

#### Cover all cuts and abrasions



MS2508 150x200 mm ISSA 4755739 IMPA 335739

#### Clean up all spillages



MS2509 150x200 mm ISSA 4755740 IMPA 335740

#### Please close door quietly



MS2510 150x200 mm ISSA 4755877 IMPA 335877

### People sleeping



MS2511 150x200 mm ISSA 4755878 IMPA 335878

#### Food waste only



Food waste only

MS5001 ISSA 4755691 300x100 mm IMPA 335691

#### No plastic / food waste



No plastic or food waste

MS5002 ISSA 4755692 300x100 mm IMPA 335692

#### Plastic only



Plastic only

MS5003 300x100 mm

ISSA 4755690 IMPA 335690

#### Think safety



MS5004 300x100 mm ISSA 4755675 IMPA 335675

#### Accidents must be reported



Report accidents

MS5005 300×100 mm ISSA 4755851 IMPA 335851

#### Wear protective clothes



Wear protective clothes in this area

MS5006 300x100 mm ISSA 4555677

#### Oil spill equipment



Oil spill equipment stored inside

MS5007 IMPA 335677 300x100 mm

#### Ventilation to be used



Ventilation to be used prior to entry

MS5008

ISSA 4755852 IMPA 335852 300x100 mm

#### Incineration only



MS5009 ISSA 4755693 300x100 mm IMPA 335693

#### Emergency exit keep clear

### **Emergency exit** Keep clear

MS5010 300x100 mm ISSA 4755830 IMPA 335830



#### Man overboard procedures



MS6001 150x200 mm ISSA 4755902 IMPA 335902

#### All visitors please report to



MS6002 ISSA 4755855 300x100 mm IMPA 335855

#### Keep this door locked



Keep this door locked on security alert

MS6003 300×100 mm

ISSA 4755825 IMPA 335825

#### Keep this door locked



Keep this door locked in port or at anchorage

MS6004 300x100 mm

#### Rescue boat launching



MS6011 200x150 mm ISSA 4755110 IMPA 335110

#### Liferaft launching



MS6012 200x150 mm ISSA 475111 IMPA 335111

#### Lifeboat launching



MS6013 200x150 mm

ISSA 4755112 IMPA 335112

#### Individual PPE must be worn



MS6021 600x400 mm

#### Automatic watertight door



MS7001 150x150 mm

#### Watertight door keep shut



MS7002 150x150 mm ISSA 4755819 IMPA 335819

#### Hatch must be kept closed



MS7003 150x150 mm ISSA 4755817 IMPA 335817

#### Door must be kept closed



MS7004 150x150 mm ISSA 4755818 IMPA 335818

#### Automatic fire door



MS7005 150x150 mm ISSA 4755808 IMPA 335808

### Close in event of fire



MS7006 150x150 mm ISSA 4755805 IMPA 335805

#### Emergency door keep clear



MS7008 150x150 mm

#### Escape hatch keep clear



MS7009 150x150 mm

#### Escape door keep clear



MS7010 150x150 mm

#### Keep clear, emergency exit



MS7011 150x150 mm ISSA 4755800 IMPA 335800

#### Fire door keep closed



MS7013 150x150 mm ISSA 4755814 IMPA 335814

#### Door to be kept locked...



MS7014 150x150 mm ISSA 4755805 IMPA 335805

### Door must be kept closed



MS7015 150x150 mm ISSA 4755801 IMPA 335801

#### Close this door at night



MS7016 150x150 mm ISSA 4753803 IMPA 335803

#### Gangway keep clear



MS7017 150x150 mm ISSA 4755812 IMPA 335812

#### Keep clear



MS7018 1.50x1.50 mm

#### Push button to open door



Push button to open door

MS8001 450x150 mm

### ALL SYMBOLS ARE AVAILABLE WITH ADDITIONAL TEXT



Text

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



#### **HVAC Room**

### **HVAC ROOM**









190x120 mm 380x240 mm

#### Galley

#### GALLEY











MU0004

250x120 mm 500x240 mm

### Steering gear room SB

#### STEERING GEAR ROOM SB











MU0007 250x140 mm 500x280 mm

#### Casing

















MU0010

250x140 mm 500x280 mm

### Emergency generator room EMERGENCY GENERATOR ROOM









MU0014 190x220 mm 380x440 mm

#### IT Room

### IT ROOM









MU0002

190x120 mm 380x240 mm

### Steering gear room

#### STEERING GEAR ROOM





MU0005

130x120 mm 260x240 mm

#### Bow thruster room

#### THRUSTER ROOM **BOW**











8000UM

250x120 mm 500x240 mm

#### Battery room

### **BATTERY ROOM**



MU0012

190x200 mm 380x400 mm

#### Emergency generator room











#### MU0015 250x220 mm 500x440 mm

### Back-up navigation

#### **BACK-UP NAVIGATION**







MU0003

190x120 mm 380x240 mm

### Steering gear room PS

# STEERING GEAR ROOM PS









MU0006 250x140 mm 500x280 mm

#### Casing



MU0009 190x140 mm 380x280 mm

### Emergency battery box



MU0013

190x200 mm 380x400 mm

#### Engine room



MU0016 250x140 mm 500x280 mm

### **MULTIPLE SIGNS**





Engine room 2

500x280 mm



MU0018 250x140 mm 500x280 mm

#### Engine control room



500x280 mm

#### Switchboard room 2



FWD Machinery area



MU0025 130x300 mm 260x600 mm



#### Switchboard room



250x140 mm

500x280 mm

### FWD Machinery area



MU0023 250x140 mm 500x280 mm

#### Switchboard room 1



MU0021 250x140 mm 500x280 mm

#### FWD Machinery area



MU0024 190x220 mm 380x440 mm

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

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• Pet-X (PVC-free, the environment-friendly choice) • Retro-Reflective

Standard symbol height for the multiple signs are 50 mm or 100 mm. All proposed texts can be changed upon request. See page 140-141 for more information.







MU0026

190x240 mm 380x280 mm

#### Stabilizer room PS



MU0029

250x140 mm 500x280 mm

#### SL. Tank room SB



MU0032

250x140 mm 500x280 mm

#### ER 1 Fan room



#### Stabilizer room SB



500x280 mm

Pump room



MU0033

250x120 mm 500x240 mm

#### ER 2 Fan room



190x240 mm 380x280 mm

#### SL. Tank room PS



MU0031

250x140 mm 500x280 mm

#### Pump room



MU0034

130x200 mm 260x400 mm

#### Treatment room



MU0035

190x240 mm

#### 380x280 mm

### Bunkering



MU0038

190x120 mm 380x240 mm

#### Hydraulic room



MU0036

250x140 mm 500x280 mm

#### Bunker station



MU0039

250x120 mm 500x240 mm

Converter room



MU0037

250x120 mm 500x240 mm







MU0040

190x200 mm 380x400 mm

#### Fuel gas treatment room



MU0041

190x200 mm 380x400 mm

#### Paint store



MU0045

190x220 mm 380x440 mm

#### PPE area



MU0048

190x200 mm 380x400 mm



#### Nitrogen room

#### **NITROGEN ROOM**



MU0042

190x200 mm 380x400 mm

### Oil & chemical store

#### OIL & CHEMICAL STORE



MU0046

5 190x200 mm 380x400 mm

#### Machinery workshop

# MACHINERY WORKSHOP

MU0049

250x120 mm 500x240 mm

#### Deck store

### **DECK STORE**



MU0044

130x120 mm 260x240 mm

### Chemical & paint store

#### **CHEMICAL & PAINT STORE**



MU0047 190x220 mm 380x440 mm

#### Confined space

#### **CONFINED SPACE**



MU0050

190x120 mm 380x240 mm

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MU0051

250x200 mm 500x400 mm

Valve center

#### **VALVE CENTER**



MU0054

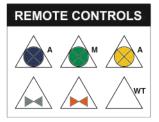
190x120 mm 380x240 mm

#### Remote controls



MU0052 250x150 mm 500x300 mm

#### Remote controls



MU0053 190x150 mm 380x300 mm

#### Helideck



MU0055 350x525 mm

#### Report to bridge



MU0056 190x240 mm 380x280 mm





#### WT door



MU2001 300x200 mm

#### Remove bottles



MU5001 ISSA 4753100 300x200 mm IMPA 333100

#### Close oxy/acetylene



MU5002 ISSA 4753101 300x200 mm IMPA 333101

#### Remove gas cylinders



MU5003 300x200 mm

ISSA 4753102 IMPA 333102

#### Use ventilation



MU5004 ISSA 4753103 300x200 mm IMPA 333103

#### Radar, satcom and radio-equipment



MU5005 ISSA 4753109 300x200 mm IMPA 333109

#### Danger keep out



MU5006 300x200 mm

ISSA 4753112 IMPA 333112

#### Danger steep ladder



MU5007 ISSA 4753116 300x200 mm IMPA 333116

#### Danger explosion risk



MU5101 300x200 mm

### Caution battery compartment



MU5102 300x200 mm

#### Danger confined space



MU5103 ISSA 4753110 300x200 mm IMPA 333110

#### Danger hazardous area



MU5104 ISSA 4753114 300x200 mm IMPA 333114

#### Do not throw garbage overboard



MU5105 300x200 mm

ISSA 4753115 IMPA 333115

### No open lights No smoking



MU5106 300x200 mm

ISSA 4758522 IMPA 338522

### Petroleum spirit highly flammable



MU5107 300x200 mm

ISSA 4753105 IMPA 333105



#### Danger gas



MU5108 300x200 mm ISSA 4753104 IMPA 333104

#### Danger petroleum spirit highly flam



MU5109 300x200 mm

#### Warning crude oil



MU5110 300x200 mm ISSA 4753106 IMPA 333106

#### Danger asbestos



MU5112 300x200 mm ISSA 4753113 IMPA 333113



#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

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### MULTIPLE SIGNS

#### Refrigerated space



MU9001 300x300 mm ISSA 4753122 IMPA 333122

#### Gas bottle store



MU9002 300x300 mm

ISSA 4753125 IMPA 333125

#### Fridge machinery



MU9003 300x300 mm

ISSA 4753129 IMPA 333119

#### Battery locker



MU9004 300x300 mm ISSA 4753123 IMPA 333123

#### Paint store



MU9005 300x300 mm ISSA 4753126 IMPA 333126

#### **Emergency generator**



MU9006 300x300 mm

ISSA 4753135 IMPA 333135

### Galley



300x300 mm

ISSA 4753124 IMPA 333124

### Switch gear



MU9008 300x300 mm IMPA 333127

#### Steering gear



MU9009 300x300 mm

ISSA 4753136 IMPA 333136

#### Machinery space



MU9010 300x300 mm ISSA 4753111 IMPA 333111

#### Machinery space



MU9011 300x300 mm ISSA 4753111 IMPA 333111

### Forecastle space



MU9012 300x300 mm

ISSA 4753128 IMPA 333128



#### Pump room



MU9013 300x300 mm ISSA 4753137 IMPA 333137

#### Chemical locker



MU9014 300x300 mm

#### Security notice



MU9016 300x300 mm

ISSA 4753139 IMPA 333139

#### Security notice



MU9017 300x400 mm

ISSA 4753138 IMPA 333138 Warning dangerous cargo



MU9018 400x600 mm

ISSA 4753014 IMPA 333014

#### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

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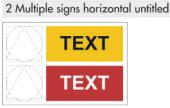
### MULTIPLE SIGNS CUSTOM MADE

Whether you need a sign to combine multiple symbols with text in your own language or you simply want to create your own custom signs from scratch, the team at T-ISS has the right tools for you. Based on professionally designed templates that are made ready for you to customize, you can easily combine multiple signs and text to create a professional looking safety sign.

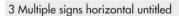
- Step 1. Choose your template to customize
- Choose your symbol(s) Step 2.
- Step 3. Choose your own text
- Choose the type of material in which we need to create your sign Step 4.
- Step 5. The team at T-ISS creates your custom made sign(s)

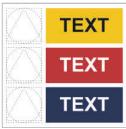
#### **CUSTOM MADE HORIZONTAL**

### **Multiple signs - Untitled**



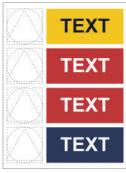
MH0102U 150×100 mm 300x200 mm





MH0302U 150x150 mm 300x300 mm

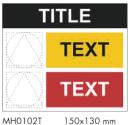
#### 4 Multiple signs horizontal untitled



MH0104U 150x200 mm 300x400 mm

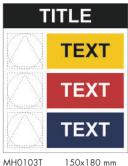
# **Multiple signs - Titled**

#### 2 Multiple signs horizontal titled



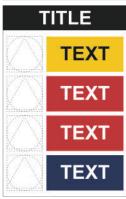
300x260 mm

#### 3 Multiple signs horizontal titled



150x180 mm 300x360 mm

#### 4 Multiple signs horizontal titled



MH0104T

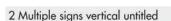
150x230 mm 300x460 mm

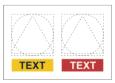


# **MULTIPLE SIGNS CUSTOM MADE**

#### **CUSTOM MADE VERTICAL**

### **Multiple signs - Untitled**

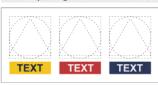




MV0201U

130x90 mm 260x180 mm

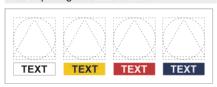
3 Multiple signs vertical untitled



MV0301U

190x90 mm 380x180 mm

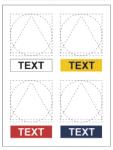
4 Multiple signs vertical untitled



MV0401U

250x90 mm 500x180 mm

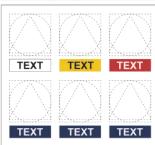
#### 2x2 Multiple signs vertical untitled



MV0202U

130x170 mm 260x340 mm

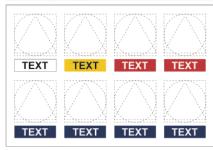
#### 3x2 Multiple signs vertical untitled



MV0302U 190x170

190x170 mm 380x340 mm

#### 4x2 Multiple signs vertical untitled

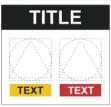


MV0402U

250x170 mm 500x340 mm

# **Multiple signs - Titled**

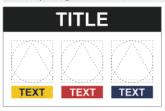
#### 2 Multiple signs vertical titled



MV0201T

130x120 mm 260x240 mm

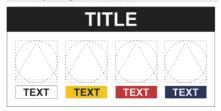
3 Multiple signs vertical titled



MV0301T

190x120 mm 380x240 mm

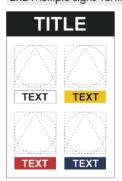
4 Multiple signs vertical titled



MV0401T

250x120 mm 500x240 mm

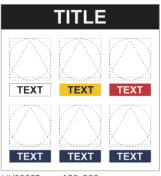
### 2x2 Multiple signs vertical titled



MV0202T

130x200 mm 260x400 mm

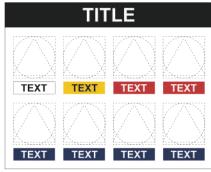
#### 2x3 Multiple signs vertical titled



MV0302T

190x200 mm 380x400 mm

#### 2x4 Multiple signs vertical titled



MV0402T

250x200 mm 500x400 mm

# **CAR DECK SIGNS**

#### Cardriver safety EN

	Beware! Moving vehicles
	No access to car deck at sea
	No smoking
	Do not start engine until instructed
•(P)•	Park in gear with handbrake on

CD1001

800x700 mm 1600x1400 mm

#### Cardriver safety FR/EN/ES



CD1011

1000x800 mm 2000x1600 mm

#### Cardriver safety EN



CD1002

Standard size 2000x600 mm

#### Cardriver safety FR/EN/ES

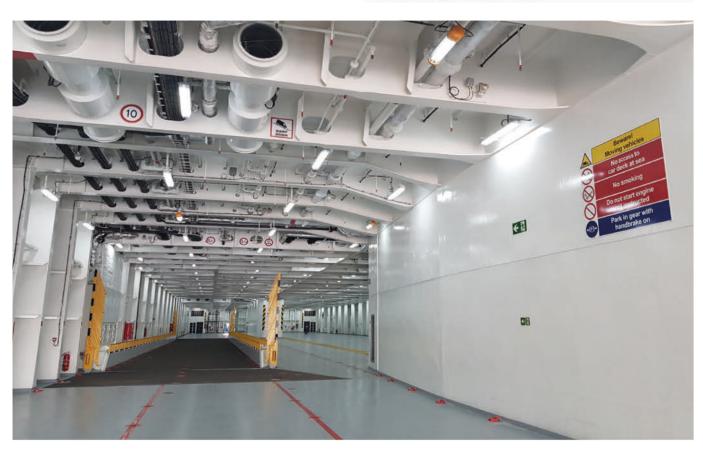


CD1012

Standard size 2000x600 mm

#### **OTHER LANGUAGES ON REQUEST**

ALSO AVAILABLE WITH COMPANY AND/OR "WELCOME ON BOARD" TEXT





### **CAR DECK SIGNS**

#### Maximum width 2,5 m



CD3001 400x400 mm

### Maximum width 2,8 m



CD3002 400x400 mm

#### Maximum width 3,1 m



CD3003 400x400 mm

#### Maximum width on request



CD3009 400x400 mm

### Maximum height 2,2 m



CD3011 400x400 mm

### Maximum height 4,8 m



CD3012 400x400 mm

### Maximum height 4,9 m



CD3013 400x400 mm



CD3031 400x400 mm

### Ramp up



CD4001 400x400 mm

### Maximum height on request



CD3019 400x400 mm

10

### Max. axle weight on request



CD3039 400x400 mm

### Ramp down



CD4002 400x400 mm

### Weight 45 t



CD3021 400x400 mm

### Max speed 10 km



CD3041 400x400 mm

### Smoking prohibited



CD4003 400x400 mm

### Maximum weight on request



CD3029 400x400 mm

### Max speed 15 km



CD3042 400x400 mm

### **OTHER SIZES ON REQUEST**

STANDARD SIZE 400X400 MM



### **SAFETY INSTRUCTION SIGNS**

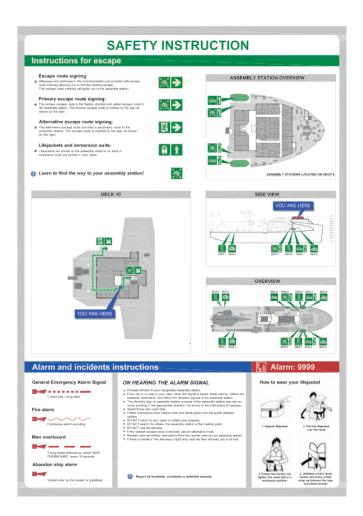
SOLAS Part 1, Chapter III-part B. regulation 8.4 and MSC/Circ. 699 requires installation and instructions in appropriate languages pasted in cabins, assembly stations and other passenger spaces showing the 'you are here' position and escape routes marked by arrows displayed on the inside of each cabin door and in public spaces. The plan shall show the directions of escape and shall be properly oriented in relation to its position on the ship.

IMO A.752(18) requires a placard explaining the LLL system in all cabins. The basics for engineering a Safety Instruction sign comes from the ship's embarkation and rescue plan and from the ISO principles of designing an evacuation plan.

### SAFETY INSTRUCTIONS CABIN

The Safety Instruction sign in a cabin displays the primary and alternative route to the designated assembly station, displayed in both plan view and sideview, emergency instructions and donning instructions for the lifejackets.

The displayed primary and alternative escape routes must be in full compliance with the signs at the LLL system and escape signs on eye height and according the ships embarkation plan.







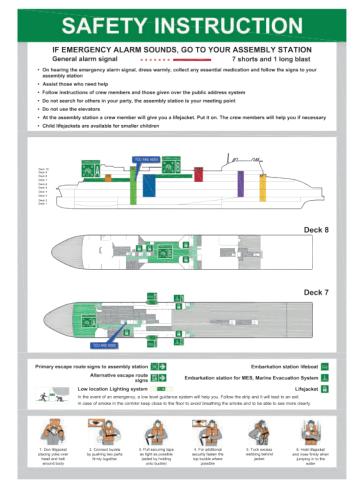
### SAFETY INSTRUCTION SIGNS

#### SAFETY INSTRUCTIONS PUBLIC SPACE

The Safety Instructions for the public areas show where you are in relation to the assembly stations, the instructions in case of emergency and near the lifejacket storage areas, the instructions for putting on the lifejackets. This plan also shows in a plan view the positions of the lifeboats, embarkation stations and life jacket stowage areas on the respective decks.

T-ISS can provide the engineering and drawing work for the Safety Instructions fully in line with the complete escape route system, consisting of the LLL with their mini symbols, photoluminescent and electrical escape route symbols and the instructions explaining the symbols used and other relevant information.

The Safety Instructions can be designed in the company's corporate style with their logos or in a neutral ISO recommended style.







### DISPLAYS OF SAFETY INSTRUCTIONS & SAFETY PLANS

T-ISS offers options to execute the safety instructions:

- PET-X vandalism resistant and glossy appearance
- PET-X photoluminescent, vandalism resistant and glossy appearance
- Click frames for easy changing of new revisions
- Vinyl sticker
- Other luxury options such as brushed Stainless Steel or polished brass



### **Click frames**

Quick and easy to exchange plans for:

- Safety instructions
- Fire Control plans
- Damage control plans
- Embarkation plans
- Muster lists
- General arrangements

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Article number	Dimension
CLF20S4	A4 (20 mm profile)
CLF20S3	A3 (20 mm profile)
CLF20S2	A2 (20 mm profile)
CLF32S1	A1 (32 mm profile)
CLF32S0	A0 (32 mm profile)
CLFCM	Dimensions on request (max. size 3000 x 1500 mm)



The insert prints can also be fitted in weather resistant Hydroprint, please ask for the possibilities. In cases of limited space e.g. at the brigde or in the ECR, we offer the Rolalux Rolldown Casette (see page 15 of this catalog).



### **ISPS SIGNS**

### Security level set of 3



ISO007 300x150 mm

### Warning

WARNING
Security seal can be removed only by authorized staff

IS1010 300x100 mm

#### ID control

### **ID CONTROL**

IS1014 300x100 mm

### Restricted area



IS1018 300x100 mm

### Keep locked



MS2032 100x150 mm

### No access for unauthorized



PS0007 150x150 mm ISSA 4758502 IMPA 338502

### Authorised personnel only



PS5029 ISSA 4758545 300x100 mm IMPA 338545

### Security level 1



ISO008 ISSA 4752703 300x150 mm IMPA 332703

#### All visitors please report

### All visitors please report to Reception

IS1011 ISSA 4752924 300x200 mm IMPA 332924

### X-ray screening

Please get your bags ready for X-Ray screening

IS1015 300x100 mm

### Direction arrow (90°)



PI1001

### All visitors please report to



MS6002 ISSA 4755855 300x100 mm IMPA 335855

### Restricted area



PS5009 ISPS027 300x100 mm IMPA 338690

### No entry unauth, pers



PS5030 ISSA 4758544 300x100 mm IMPA 338544

### Security level 2



ISO009 ISSA 4752703 300x150 mm IMPA 332703

#### All visitors report to security office

### All visitors must report to the ships security office

IS1012 ISSA 4752824 300x200 mm IMPA 332824

#### Metal detector

Please get your bags ready for metal detector check

IS1016 300x100 mm

### Direction arrow (45°)



PI1002 100x100 mm

#### Keep this door locked



MS6003 ISSA 4755825 300x100 mm IMPA 335825

### No photography



PS5010 300x100 mm

### Restricted area...



PS5031 ISSA 4758691 300x100 mm IMPA 338691

### Security level 3



ISO010 ISSA 4752703 300x150 mm IMPA 332703

### Ship security office

### SHIP SECURITY OFFICE

IS1013 ISSA 4752892 300x100 mm IMPA 332895

### Reception

### RECEPTION

IS1017 ISSA 4752907 300x100 mm IMPA 332907

### Keep this door locked



MS6004 300x100 mm

### Do not enter



PS5024 ISSA 4758542 300x100 mm IMPA 338542

### Restricted area...



PS5032 300x100 mm 150

### **ISPS SIGNS**

#### Restricted area

# RESTRICTED AREA UNAUTHORISED PRESENCE WITHIN THIS AREA

CONSTITUTES A BREACH OF SECURITY

IS1040 300x200 mm

### VDR voice recording



IS3001 150x150 mm ISSA 4752889 IMPA 332889

#### Restricted area



IS1041 ISSA 4758695 300x200 mm IMPA 338695

#### CCTV surveillance



IS3002 150x150 mm ISSA 4752896 IMPA 332896

#### Crew member

Crew members and passengers are reminded that for safety and security reasons some areas on the ship may be restricted and controlled

IS1042 300x200 mm

### CCTV in operation



IS3003 150x150 mm ISSA 4752974 IMPA 332974

### Ship complies with IMO ISPS code



IS1043 300x200 mm 900x450 mm

ISSA 4753140 IMPA 333140

#### Security notice



MU 9016 300x300 mm ISSA 4753139 IMPA 333139

#### Security notice



MU 9017 300x400 mm ISSA 4753138 IMPA 333138

### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**



#### Liferaft launching



TPOO01 300x400 mm

ISSA 4751002 IMPA 331502

### **Enclosed spaces**



TP0003 300x400 mm

ISSA 4751017 IMPA 331517

#### Liferaft launched with a davit



TP0004 300x400 mm

ISSA 4751045 IMPA 331545

### Safety signs in enclosed space



TP0005 300x400 mm

ISSA 4751007 IMPA 331507

### Oil spill prevention



TP0006 300x400 mm

ISSA 4751008 IMPA 331508

### Oil spill actions



TP0007 300x400 mm

ISSA 4751023 IMPA 331523

### Types of fire extinguishers



TP0008 300x400 mm

ISSA 4751027 IMPA 331527

### Gas precautions



TP0009 300x400 mm

ISSA 4751032 IMPA 331532

### Lifeboat launching



TP0010 300x400 mm

O ISSA 4751001 O mm IMPA 331501

### Free fall lifeboat

FREE F	ALL LIF	EBOAT
Table 1	C C C C C C C C C C C C C C C C C C C	3 renegations
4 наменя	5	6 пуктика истоно
o. Phh	4	

TPOO11 300x400 mm

ISSA 4751020 IMPA 331520

### Launching lifeboats



TP0012 300x400 mm

ISSA 4751005 IMPA 331505

### Enclosed lifeboat launching



TP0013 300x400 mm

ISSA 4751004 IMPA 331504

### Abandon ship



TP0014

ISSA 4751016 IMPA 331516

Serious injury / shock



TP0015

ISSA 4751009 IMPA 331509

### Enclosed space and tank rescue



TP0016 300x400 mm

ISSA 4751017 IMPA 331517

#### Man overboard



TP0017

ISSA 4751015 IMPA 331515



### Craneage safety signals



TP0018 300x400 mm

ISSA 4751030 IMPA 331530

### IMO safety symbols



TPOO19 ISSA 4751036 300x400 mm IMPA 331536

### Life-saving signals and rescue...



TP0020 ISSA 4751058 400x300 mm IMPA 331558

#### Gangways



TP0021 300x400 mm

ISSA 4751014 IMPA 331514

### Accomodation ladders



TP0022 300x400 mm

ISSA 4751013 IMPA 331513

### Food hygiene on board



TP0023 300x400 mm

ISSA 4751044 IMPA 331544

### Engine and machine room safety



TP0024 300x400 mm

ISSA 4751035 IMPA 331535

### Outboard or aloft work jobs



TP0025 300x400 mm

ISSA 4751025 IMPA 331525

### Refuelling



TP0026 300x400 mm

ISSA 4751022 IMPA 331522

### Personal protection gear

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PROTECT	ION GEAR	
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TP0027 300x400 mm

ISSA 4751028 IMPA 331528

### Signals; light, shape and sound

u	SIGNALS: LIGHT, SHAPE & SOUND				
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TP0028 300x400 mm

ISSA 4751034 IMPA 331534

### Hot work



TP0029 300x400 mm

ISSA 4751024 IMPA 331524

### Fire and explosion vital actions



TP0030 300x400 mm

ISSA 4751031 IMPA 331531

### Self contained breathing app.



TP0031

ISSA 4751047 IMPA 331547

### Safe welding and cutting



TP0032

ISSA 4751033 IMPA 331533

#### Towing



TP0033 300x400 mm

ISSA 4751021 IMPA 331521



#### Immersion suit donning



TP0034 300x400 mm

#### Lifejacket instructions



TP0035 300x400 mm

### Garbage overboard



ISSA 4751042 TP0036 IMPA 331542 300x400 mm

### Mooring procedures



TP0037 300x400 mm

ISSA 4751064 IMPA 331564

### Fast rescue boat operation



TP0038 300x400 mm

### Precautions against piracy



TP0039 300x400 mm

### IMO fire control symbols



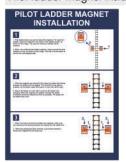
ISSA 4751057 TP0040 IMPA 331557 300x400 mm

### Pipe marking ISO14726



ISSA 4751066 TP0041 IMPA 331566 300x400 mm

### Pilot ladder magnet installation



TP0043 300x400 mm

### Hazard chemical signage



ISSA 4751044 TP0044 IMPA 331544 300x400 mm

### Hazard diamonds



ISSA 4751048 TP0045 IMPA 331548 300x400 mm

### Hazard substance symbols



ISSA 4751049 TP0046 IMPA 331549 300x400 mm

### Regulations garbage disposal

District Control	QUISIDE SPECIAL	TANK BUILDINGS
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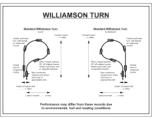
ISSA 4751029 TP0048 IMPA 331529 300x400 mm

### Oil discharge USA



ISSA 4751043 TP0049 IMPA 331543 400x300 mm

### Williamson turn



ISSA 4751065 TP0050 IMPA 331565 400x300 mm

### Pilot card



TP0051 400x300 mm

ISSA 4751011 IMPA 331511



### Required boarding arrangements



TP0052 400x300 mm

ISSA 4751526 IMPA 331526

### Visitors safety instructions



TP0053 400x300 mm

#### Pneumatic locker installation



TP0054 300x400 mm

### Flag chart



TP0057 300x400 mm

### Emergency evacuation instructions



TP0058 300x400 mm

ISSA 4755900 IMPA 335900

### Emergency instructions passengers



TP0059 ISSA 4755903 300x400 mm IMPA 335903

#### HRU installation instruction



TP0060 300x400 mm

### Helicopter operations landing



TP0061 300x400 mm

### Vessel induction/familiarisation



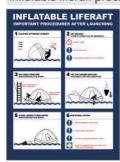
TP0062 300x400 mm

### Helicopter operations winching



TP0063 300x400 mm

### Inflatable liferaft procedures



TP0064 300x400 mm

### Fire isolator instruction



TP0065 300x400 mm

### **ALSO AVAILABLE UPON REQUEST:**

Article number	Description	Dimensions	ISSA	IMPA
TP0002	Evacuation chute and slide	300x400 mm	4751046	331546
TP0042	Compass rose	300x400 mm		-
TP0047	Low location light instructions	300x400 mm	.=	5.
TP0055	Smoking regulation	300x400 mm		-
TP0056	Dead man alarm	300x400 mm		2



### Forbidden to throw garbage overboard



TP1001 300x400 mm

ISSA 4751042 IMPA 331542

### Map wheelhouse 1/2

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TP1002 300x400 mm

ISSA 4751010 IMPA 331510

### Map wheelhouse 2/2



TP1003 300x400 mm

ISSA 4751010 IMPA 331510

### Emergency muster list



TP1004 300x400 mm

ISSA 4751012 IMPA 331512

### Drug warning notice



TP1005 200x300 mm ISSA 4751037 IMPA 331537

### Drug and alcohol warning notice



TP1006 200x300 mm

ISSA 4751039 IMPA 331539

### Warning notice



TP1007 200x300 mm ISSA 4751041 IMPA 331541

### Rescue boat launcing procedure



TP1008 400x300 mm ISSA 4751001 IMPA 331501

### Discharge of oil prohibited

### DISCHARGE OF OIL PROHIBITED

THE FEDERAL WATER POLLUTION CONTROL ACT PROHIBITS THE DISCHARGE OF DIL OR DILY WASTE INTO OR UPON THE NAVIGABLE WATERS AND CONTIQUOUS ZONE OF THE UNITED STATES IF SUCH DISCHARGE CAUSES A FILM OR SHEEN UPON, OR DISCOLORATIONS OF, THE SURFACE OF THE WATER, OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER, OR CAUSES A SLUDGE OR EMULSION BENEATH THE SURFACE OF THE WATER, VIOLATORS ARE SUBJECT TO A PENALTY OF \$ 5,000

TP1009 400x300 mm ISSA 4751043 IMPA 331543

#### Oil pollution event

IN THE EVENT OF AN OIL POLLUTION INCIDENT, OR THREAT OF A POLLUTION INCIDENT IMMEDIATELY INFORM THE MASTER AND OFFICER ON DUTY. FOR FURTHER HANDLING FOLLOW THE GUIDELINES OF THE SHIPBOARD OIL POLLUTION PLAN.

TP1010 400x300 mm

### Garbage disposal plan



ISSA 4751029 TP1011 400x300 mm

### Cutting boards



TP1012 300x400 mm

### Discharge of garbage



TP1013 300x400 mm 156

### TIE TAGS

#### Caution



TT 0001 70x100mm ISSA 4752501 IMPA 332501

### Defective equipment



TT 0002 70x100mm ISSA 4752502 IMPA 332502

#### Asbestos



TT 0003 70x100mm ISSA 4752503 IMPA 332503

#### Current on



TT 0004 70x100mm ISSA 4752504 IMPA 332504

#### Harmful



TT 0005 70x100mm ISSA 4752505 IMPA 332505

#### Irritant



TT 0006 70x100mm ISSA 4752506 IMPA 332506

#### Corrosive



TT 0007 70x100mm ISSA 4752507 IMPA 332507

#### Flammable



TT 0008 70x100mm ISSA 4752508 IMPA 332508

### Explosive



TT 0009 70x100mm ISSA 4752509 IMPA 332509

### Poison



TT 0010 70×100mm ISSA 4752510 IMPA 332510

#### Gas



TT 0011 70x100mm ISSA 4752541 IMPA 332541

### Do not close valve



TT 0012 70x100mm ISSA 4752520 IMPA 332520

### Do not open valve



TT 0013 70x100mm ISSA 4752521 IMPA 332521

### Do not close



TT 0014 70x100mm ISSA 4752522 IMPA 332522

### Do not open



TT 0015 70x100mm ISSA 4752523 IMPA 332523

#### Do not move



TT 0016 70x100mm ISSA 4752524 IMPA 332524

#### Do not start



TT 0017 70x100mm ISSA 4752525 IMPA 332525

#### Do not use



TT 0018 70x100mm ISSA 4752526 IMPA 332526

### Do not start, men working



TT 0019 70x100mm ISSA 4752527 IMPA 332527

### Do not use, out of order



TT 0020 70x100mm ISSA 4752528 IMPA 332528

### Do not operate



TT 0021 70x100mm ISSA 4752530 IMPA 332530

### Do not touch



TT 0022 70x100mm ISSA 4752531 IMPA 332531

### **GENERAL INFORMATION**

THE TIE TAGS ARE DELIVERED IN PACKS OF 10 PCS THE STANDARD SIZE IS 70 X 100 MM



### **PUBLIC INFORMATION SIGNS**

### Toilets female



PIOOO1 150x150 mm ISSA 4752409 IMPA 332409

#### Toilets male



PIOOO2 150x150 mm ISSA 4752410 IMPA 332410

#### Toilets unisex



PIOOO3 150x150 mm ISSA 4752408 IMPA 332408

#### Toilets - disabled / full accessible



PIOOO4 150x150 mm ISSA 4752401 IMPA 332401

### Reception or check-in



PIOOO5 150x150 mm

#### Information



PI0006 150x150 mm

#### Meeting point



PI0007 150x150 mm

#### Cinema



PIOOO8 150x150 mm

#### Nursery or baby care



PIOOO9 150x150 mm ISSA 4752443 IMPA 332443

#### Business center



PIOO10 150x150 mm

### Teaching room



PIOO11 150x150 mm

#### Meeting room or conference facilities



PIOO12 150x150 mm

#### Lounge or waiting area



PIOO13 150x150 mm

### Cupboard



PIOO14 150x150 mm

### Trash box or litter bin



PIOO15 150x150 mm

#### Restaurant



PI0016 150x150 mm

### Refreshments - Coffee or buffet



PIOO17 150x150 mm

### Surveillance camera



PI0018 150x150 mm

### Accomodation facilities or hotel



PIOO19 150x150 mm

### Shop or shopping



PI0020 150x150 mm

### Pharmacy



PIOO21 150x150 mm

### Bar



PI0022 150x150 mm

### Snack machine



PIOO23 150x150 mm

### Smoking area or smoking allowed



PIOO24 150x150 mm

### Sauna



PIOO25 150x150 mm

### Hospital



PI0026 150x150 mm

#### Drinking water



PIOO27 150x150 mm

#### Shower



PI0028 150x150 mm

### **MATERIAL SPECIFICATIONS & AVAILABLE SIZES**

Standard size signs made of Pet-X material are all on stock and directly available. Each of the signs in this catalog are available in multiple different types of materials:

• Pet-X (PVC-free, the environment-friendly choice)

• Retro-Reflective

• Aluminum light

• PVC

• Transparant Vinyl

• White, self-adhesive vinyl (non-reflective)

Non-standard sizes and materials other than the standard Pet-X material are available upon request. See page 83 for more information.

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### **PUBLIC INFORMATION SIGNS**

### Lost and found property



PI0029 150x150 mm

### Baggage lockers or coin lockers



PI0030 150x150 mm

#### Stairs



PI0031 150x150 mm

### Lift

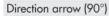


PIOO32 150x150 mm

### Accessable lift



PI0033 150x150 mm





PI1001 150x150 mm

### Direction arrow (45°)



PI1002 150x150 mm

### Toilet instructions



PI2001 150x150 mm

### Hand dryer



PI2002 150x150 mm

### All visitors report to security office



PI5001 150x150 mm

### All visitors report to reception



PI5002 150x150 mm

#### No access



PI5003 150x150 mm ISSA 4752421 IMPA 332421





### SIGNAL FLAGS

### Signalflag A



FL001 1500x1000 mm ISSA 371511



FL002 1500x1000 mm ISSA 371512 IMPA 491316

### Signalflag C



1500x1000 mm ISSA 371513 IMPA 491317

FL003



FL004 1500x1000 mm

ISSA 371514

IMPA 491318

Signalflag E



FL005 1500x1000 mm ISSA 371515 IMPA 491319

Signalflag F



FL006 1500x1000 mm ISSA 371516 IMPA 491320





1500x1000 mm ISSA 371517 IMPA 491321

FL007

Signalflag H



FL008 1500x1000 mm ISSA 371518

IMPA 491322

Signalflag I



FL009 1500x1000 mm ISSA 371519

IMPA 491323

Signalflag J



FL010 1500x1000 mm ISSA 371520 IMPA 491324

Signalflag K



FLO11 1500x1000 mm ISSA 371521 IMPA 491325

Signalflag L



FL012 1500x1000 mm ISSA 371522

IMPA 491326

Signalflag M



FL013 1500x1000 mm ISSA 371523

IMPA 491327

Signalflag N



FL014 1500x1000 mm ISSA 371524

IMPA 491328

Signalflag O



1500x1000 mm ISSA 371525 IMPA 491329

FL015

Signalflag P



FL016 1500x1000 mm

ISSA 371526 IMPA 491330

Signalflag Q



FL017 1500x1000 mm ISSA 371527 IMPA 491331

Signalflag R



FL018 1500x1000 mm ISSA 371528 IMPA 491332

Signalflag S



1500x1000 mm ISSA 371529 IMPA 491333

FL019

Signalflag T



FL020 1500x1000 mm ISSA 371530

IMPA 491334

Signalflag U



FL021 1500x1000 mm ISSA 371531 IMPA 491335

Signalflag V



FL022 1500x1000 mm ISSA 371532 IMPA 491336

Signalflag W



FL023 1500x1000 mm ISSA 371533 IMPA 491337

Signalflag X

FL024 1500x1000 mm ISSA 371534

IMPA 491338

Signalflag Y



FL025 1500x1000 mm ISSA 371535 IMPA 491339

Signalflag Z



FL026 1500x1000 mm ISSA 371536 IMPA 491340

**GENERAL INFORMATION** 

WE HAVE ALL COUNTRY FLAGS ON STOCK!



### MOUNTING MATERIALS AND PANELS

T-ISS offers a wide range of tools for fixation of signs, particularly suitable for the outdoor exposure at sea or in the heavy industry.

### **FOAM MOUNTING TAPE**

The tape is a closed-cell, polyethylene foam, coated with a high tack / high shear acrylic adhesive. It has superior chemical and fuel resistance, and good outdoor weather resistance. Technical data can be found on page 54.





Article number	Dimensions
FMT10-020	20 mm x 10 m
FMT10-040	40 mm x 10 m
FMT10-050	50 mm x 10 m
FMT50-150	150 mm x 50 m

### **SECURITY LEVEL SIGN HOLDER**

Transparent sign holder in which the signs can be easily changed to inform about the current security level.





Article number	Dimension		
SH-WB3	310 x 155 mm		

### **MOUNTING SEALANT AND ADHESIVE**

A high viscosity construction sealant and adhesive, one component, fast drying, elastic, humidity curing on MS Polymer basis.

- Primerless adhesion to many surfaces
- High initial and end tack
- Fast drying
- UV stable
- Work temperature; min. +5 °C, max. +35 °C
- Temperature resistance; from 40 °C up to 100 °C



Article number	Content	
MSA-ST780	250 ml	

# SET RAILINGBRACKETS STAINLESS STEEL

Pair of brackets for easy fixation signs between railing tubes without welding. Pickled and passivated Stainless Steel (SS316), comes complete with SS hose clamps, bolts, nuts, washes and teflon insulation strips. To combine with diffent sizes stainless steel backplates. Lay-outs, sizes of brackets and hose clamps are always custom-made per situation and available on request.







### **BACKPLATES STAINLESS STEEL**

Quality pickled and passivated, also for use in salt water circumstances. To combine with Stainless Steel railingbrackets. Lay-out and size available on request.





### **MOUNTING MATERIALS AND PANELS**

### **MOUNTING PANEL RIGHT ANGLED**

Coated aluminium mounting panel without safety signs. To be used in corridors for a clear view at safety signs from both directions.





Article number	Dimension
MPRA-HH	200 x 200 mm
MPRA-HJ	200 x 267 mm

### **MOUNTING BOX TRIANGLE**

For installation on 2" pipe. Box without safety signs. To be used in open space for a clear view at safety signs from all directions.

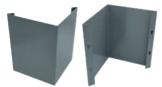




Article number	Dimension
MBTA-HH	200 x 200 mm
MBTA-HJ	200 x 267 mm

### **MOUNTING PANEL PANORAMIC**

Stainless Steel or coated aluminium panel without safety signs. To be used at longer bulkheads for a clear view at the safety signs from all directions.





Article number	Dimension (w x h)
MPPA-HH	200 x 200 mm (coated aluminium)
MPPA-HJ	$200 \times 267$ mm (coated aluminium)
MPPS-HH	200 x 200 mm (Stainless Steel)
MPPS-HJ	200 x 267 mm (Stainless Steel)

### **DOUBLE FOLDED EDGE PANEL**

Coated Aluminium Double Folded Edge (DFE) panel without safety sign. To be used for pole mounting with brackets. Lay-out and size available on request.





### **MOUNTING PANEL STAINLESS STEEL**

Stainless Steel mounting panel with welded-on brackets for fixation on railing tubes with SS hose clamps.





Article number	Dimension (w x h)
MPBS-GG	150 x 150 mm
MPBS-KG	300 x 150 mm
MPBS-HH	200 x 200 mm

### **MOUNTING PANEL CEILING**

Aluminium without safety sign, for use inside accomodation on the ceiling. Can be used single- and double sided.





Article number	Dimension (w x h)
MPRE-KE	300 x 100 mm
MPRE-KG	300 x 150 mm
MPRE-MG	450 x 150 mm
MPRE-HH	200 x 200 mm
MPRE-HJ	200 x 267 mm
MPRE-XX	Other sizes on request





### INTRODUCTION

Marking pipes on ships, offshore or onshore sites is essential to ensure safety at all times. Accidents, injuries and damage to machines and equipment can be caused by the fact your crew, operators or external maintenance engineers and intervention services are unaware of the risks of the substances that flow through pipes. The importance of marking pipes becomes clear when we look at the different standards & regulations.

### Standards & regulations

Several regional or maritime organisations require compliance with pipe marking standards. Whether it is ISO 14726, ISO 20560, ANSI, ASME A13.1, BSI 1710, DIN 2403, NORSOK or other company standards, T-ISS can supply the correct and compliant pipemarkers in any color with any print that meet these standards.

Because of this variety in global or regional standards, the new published ISO 20560 standard will realize a truly global, harmonized system of hazard recognition for pipemarking systems with uniformity of graphics, color-coding and formatting of safety messages. T-ISS can supply you with pipe markers meet the requirements of this new ISO 20560 standard.

### PIPE MARKING REQUIREMENTS

The color, the color pattern, the size, the width, the content description, the letter size, the flow direction and the safety symbols differ from one standard to another. Our markers, regardless of the sector in which they are to be used, always comply with the latest applicable standards and requirements regarding legislation and regulations.

### Where to apply pipe markings?

- At least one in every room for every pipe and every medium
- At frequent intervals on straight pipe runs, between 3 and 5 meter
- When pipes pass through the floor, ceiling or wall, mark both sides
- When pipes change direction
- In the proximity of each valve and pump

For particular surfaces or if the pipes have a too large diameter, it is also possible to provide individual pipe markers. This marker contains all the necessary information in accordance with legislation and regulations, such as color coding, medium name, safety symbols and possibly the direction of flow. These also differ per standard.

### **Layout & Design**

Within our production process we can make several different layouts of pipe marking. These layouts always include the mandatory (in most national norms & regulations) safety information:

- Flow direction
- GHS/CLP symbols and warning signs
- Pipe contents description

It has recently also become common to include process information, secondary language and more detailed information about the hazard symbols and even QR codes.

### **Customized Pipe Marking**

Our fully customizable pipemarkers can include all the pipe, contents and flow information your location (both maritime, offshore or industry & chemical sectors) needs to optimally increase workplace safety and efficiency. We will produce all pipe markers using the colors according to the latest global or local regulations and your specific demands. We can supply customized pipe markers with an Self-Adhesive layer, or Non-Adhesive.



Pipe Marking according ISO 20560-1



Customized Pipe Marking

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### PIPE MARKING QUALITY LEVELS

We supply pipe markers for any location (maritime, offshore or onshore) in the world. Our standard maritime programm has 3 quality levels and can be fully customised to include any pipe, contents and flow information your location or customer needs.

### **Single Color Pipe Marking**

Single color pipe marking tape is a tape which needs to be combined with the correct color coding. Additionally, a flow direction tape can be added to the combination to enhance identification.



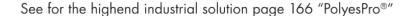
### **Vinyl Unlaminated Pipe Marking (Economy Line)**

This pipe marking tape is an economic, unlaminated vinyl. The recommended use of this tape is indoors such as a ships engineroom and can be used outdoors with a short lifespan compared to PolyesPro® and the Basic Line.



### Vinyl Laminated Pipe Marking (Basic Line)

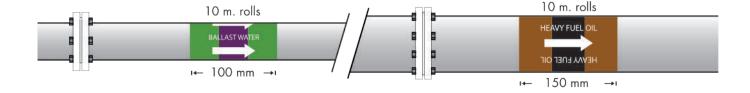
This pipe marking tape is a standard performance vinyl sandwich manufactured according to  $3M^{TM}$  MCS<sup>TM</sup> (Matched Component System<sup>TM</sup>) production specifications. This tape comes with a gloss laminated finish and can be used outdoor and indoor in various types of environments.





### ELEMENTS OF PIPE MARKING DESIGN

Our multi-color pipe marking comes standard with medium text and flow direction and is available in two sizes (100 and 150 mm wide). The pipe marking tape can also be supplied without text and flow direction upon request.



### SINGLE COLOR PIPE MARKING

COLOR	DESCRIPTION	ARTICLE NUMBER	COLOR	DESCRIPTION	ARTICLE NUMBER
	Waste media	PMT050BK		Oil other than fuel	PMT050OG
	Fresh water	PMT050BU		Steam	PMT050BSR
	Fuel	PMT050BN		Fire fighting	PMT050RD
	Sea water	PMT050GN		Air in vent. systems	PMT050WH
	Non-flammable gases	PMT050GY		Flammable gases	PMT050YE
	Masses (dry and wet)	PMT050MN		Acids and alkalis	PMT050VT
+++++	Flow direction	PMT050AR			



## MARITIME PIPE MARKING COLOR CODING According ISO 14726

	WASTE MEDIA	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
CK WATER	Black water	PM2BKBU_PBZA	PM2BKBU_PBZB	PM2BKBU_PEZA	PM2BKBU_PEZB
ASTE CIL	Waste oil	PM2BKBN_PBZA	PM2BKBN_PBZB	PM2BKBN_PEZA	PM2BKBN_PEZB
GE WATER	Bilge Water	PM2BKGN_PBZA	PM2BKGN_PBZB	PM2BKGN_PEZA	PM2BKGN_PEZB
HAUST GAS	Exhaust gas	PM2BKGY_PBZA	PM2BKGY_PBZB	PM2BKGY_PEZA	PM2BKGY_PEZB
GREY	Grey water	PM2BKWH_PBZA	PM2BKWH_PBZB	PM2BKWH_PEZA	PM2BKWH_PEZB
E CONTAMENATE	Sewage contaminated	PM2BKYE_PBZA	PM2BKYE_PBZB	PM2BKYE_PEZA	PM2BKYE_PEZB
<b>∃</b> ≓	Black water	PM1BKBU_PBZA	PM1BKBU_PBZB	PM1BKBU_PEZA	PM1BKBU_PEZB
	Waste oil	PM1BKBN_PBZA	PM1BKBN_PBZB	PM1BKBN_PEZA	PM1BKBN_PEZB
<b>I</b>	Bilge Water	PM1BKGN_PBZA	PM1BKGN_PBZB	PM1BKGN_PEZA	PM1BKGN_PEZB
	Exhaust gas	PM1BKGY_PBZA	PM1BKGY_PBZB	PM1BKGY_PEZA	PM1BKGY_PEZB
3 3	Grey water	PM1BKWH_PBZA	PM1BKWH_PBZB	PM1BKWH_PEZA	PM1BKWH_PEZB
- 3	Sewage contaminated	PM1BKYE PBZA	PM1BKYE PBZB	PM1BKYE PEZA	PM1BKYE PEZB

	FUEL	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
AVY FUEL OIL	Heavy fuel oil (HFO)	PM2BNBK_PBZA	PM2BNBK_PBZB	PM2BNBK_PEZA	PM2BNBK_PEZB
ATION FUEL	Aviation fuel	PM2BNBU_PBZA	PM2BNBU_PBZB	PM2BNBU_PEZA	PM2BNBU_PEZB
OGICAL FUEL	Biological fuel	PM2BNVT_PBZA	PM2BNVT_PBZB	PM2BNVT_PEZA	PM2BNVT_PEZB
TURBINE FUEL	Gas-turbine fuel	PM2BNWH_PBZA	PM2BNWH_PBZB	PM2BNWH_PEZA	PM2BNWH_PEZB
VE DIESEL OIL	Marine diesel oil (MDO)	PM2BNYE_PBZA	PM2BNYE_PBZB	PM2BNYE_PEZA	PM2BNYE_PEZB
<b>∏</b> ≓	Heavy fuel oil (HFO)	PM1BNBK_PBZA	PM1BNBK_PBZB	PM1BNBK_PEZA	PM1BNBK_PEZB
3	Aviation fuel	PM1BNBU_PBZA	PM1BNBU_PBZB	PM1BNBU_PEZA	PM1BNBU_PEZB
<b>  </b>	Biological fuel	PM1BNVT_PBZA	PM1BNVT_PBZB	PM1BNVT_PEZA	PM1BNVT_PEZB
13	Gas-turbine fuel	PM1BNWH_PBZA	PM1BNWH_PBZB	PM1BNWH_PEZA	PM1BNWH_PEZB
⊒⇒	Marine diesel oil (MDO)	PM1BNYE_PBZA	PM1BNYE_PBZB	PM1BNYE_PEZA	PM1BNYE_PEZB

	NON-FLAMMABLE GASSES	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
OXYGEN	Oxygen	PM2GYBU_PBZA	PM2GYBU_PBZB	PM2GYBU_PEZA	PM2GYBU_PEZB
INERT GAS	Inert gas	PM2GYBN_PBZA	PM2GYBN_PBZB	PM2GYBN_PEZA	PM2GYBN_PEZB
NTROGEN	Nitrogen	PM2GYGN_PBZA	PM2GYGN_PBZB	PM2GYGN_PEZA	PM2GYGN_PEZB
RIJ RIGERANT	Refrigerant	PM2GYMN_PBZA	PM2GYMN_PBZB	PM2GYMN_PEZA	PM2GYMN_PEZB
MPRESSED AIR LP	Compressed air (LP) Low Pressure	PM2GYOG_PBZA	PM2GYOG_PBZB	PM2GYOG_PEZA	PM2GYOG_PEZB
MERIOSEE AIR HE	Compressed air (HP) High Pressure	PM2GYRD_PBZA	PM2GYRD_PBZB	PM2GYRD_PEZA	PM2GYRD_PEZB
TITOS, ANI NEGO JATTHO WILL	Control air / regulating air	PM2GYVT_PBZA	PM2GYVT_PBZB	PM2GYVT_PEZA	PM2GYVT_PEZB
BREATHING AIR	Breathing air (used in submarines)	PM2GYWH_PBZA	PM2GYWH_PBZB	PM2GYWH_PEZA	PM2GYWH_PEZB
INEATHING GAS	Breathing gas (used in submarines)	PM2GYYE_PBZA	PM2GYYE_PBZB	PM2GYYE_PEZA	PM2GYYE_PEZB
⇉	Oxygen	PM1GYBU_PBZA	PM1GYBU_PBZB	PM1GYBU_PEZA	PM1GYBU_PEZB
⇉	Inert gas	PM1GYBN_PBZA	PM1GYBN_PBZB	PM1GYBN_PEZA	PM1GYBN_PEZB
<b>→</b>	Nitrogen	PM1GYGN_PBZA	PM1GYGN_PBZB	PM1GYGN_PEZA	PM1GYGN_PEZB
<b>=</b> =	Refrigerant	PM1GYMN_PBZA	PM1GYMN_PBZB	PM1GYMN_PEZA	PM1GYMN_PEZB
<b>#</b>	Compressed air (LP) Low Pressure	PM1GYOG_PBZA	PM1GYOG_PBZB	PM1GYOG_PEZA	PM1GYOG_PEZB
⇉	Compressed air (HP) High Pressure	PM1GYRD_PBZA	PM1GYRD_PBZB	PM1GYRD_PEZA	PM1GYRD_PEZB
<b> </b>	Control air / regulating air	PM1GYVT_PBZA	PM1GYVT_PBZB	PM1GYVT_PEZA	PM1GYVT_PEZB
<b>=</b>	Breathing air (used in submarines)	PM1GYWH_PBZA	PM1GYWH_PBZB	PM1GYWH_PEZA	PM1GYWH_PEZB
= =	Breathing gas (used in submarines)	PM1GYYE_PBZA	PM1GYYE_PBZB	PM1GYYE_PEZA	PM1GYYE_PEZB



Fresh water, sanitairy Potable water Distillate	PM2BUBN_PBZA PM2BUGN_PBZA	PM2BUBN_PBZB	PM2BUBN_PEZA	PM2BUBN_PEZB
	PM2BUGN_PBZA	B. (0B) (0:		
Distillate		PM2BUGN_PBZB	PM2BUGN_PEZA	PM2BUGN_PEZB
	PM2BUGY_PBZA	PM2BUGY_PBZB	PM2BUGY_PEZA	PM2BUGY_PEZB
Gas-turbine wash water	PM2BUOG_PBZA	PM2BUOG_PBZB	PM2BUOG_PEZA	PM2BUOG_PEZB
Feed water	PM2BUSR_PBZA	PM2BUSR_PBZB	PM2BUSR_PEZA	PM2BUSR_PEZB
Cooling fresh water	PM2BUVT_PBZA	PM2BUVT_PBZB	PM2BUVT_PEZA	PM2BUVT_PEZB
Chilled water	PM2BUWH_PBZA	PM2BUWH_PBZB	PM2BUWH_PEZA	PM2BUWH_PEZB
Condensate	PM2BUYE_PBZA	PM2BUYE_PBZB	PM2BUYE_PEZA	PM2BUYE_PEZB
Fresh water, sanitairy	PM1BUBN_PBZA	PM1BUBN_PBZB	PM1BUBN_PEZA	PM1BUBN_PEZB
Potable water	PM1BUGN_PBZA	PM1BUGN_PBZB	PM1BUGN_PEZA	PM1BUGN_PEZB
Distillate	PM1BUGY_PBZA	PM1BUGY_PBZB	PM1BUGY_PEZA	PM1BUGY_PEZB
Gas-turbine wash water	PM1BUOG_PBZA	PM1BUOG_PBZB	PM1BUOG_PEZA	PM1BUOG_PEZB
Feed water	PM1BUSR_PBZA	PM1BUSR_PBZB	PM1BUSR_PEZA	PM1BUSR_PEZB
Cooling fresh water	PM1BUVT_PBZA	PM1BUVT_PBZB	PM1BUVT_PEZA	PM1BUVT_PEZB
Chilled water	PM1BUWH_PBZA	PM1BUWH_PBZB	PM1BUWH_PEZA	PM1BUWH_PEZB
Condensate	EW 250 W 35 1985W	PM1BUYE PBZB	PM1BUYE PEZA	PM1BUYE_PEZB
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			10.771.75 = 1.75
SEA WATER	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
Decontamination water	PM2GNBU_PBZA	PM2GNBU_PBZB	PM2GNBU_PEZA	PM2GNBU_PEZB
Sea water, sanitairy	PM2GNBN_PBZA	PM2GNBN_PBZB	PM2GNBN_PEZA	PM2GNBN_PEZB
Ballast water	PM2GNVT_PBZA	PM2GNVT_PBZB	PM2GNVT_PEZA	PM2GNVT_PEZB
Cooling sea water	PM2GNYE_PBZA	PM2GNYE_PBZB	PM2GNYE_PEZA	PM2GNYE_PEZB
Decontamination water	PM1GNBU_PBZA	PM1GNBU_PBZB	PM1GNBU_PEZA	PM1GNBU_PEZB
Sea water, sanitairy	PM1GNBN_PBZA	PM1GNBN_PBZB	PM1GNBN_PEZA	PM1GNBN_PEZB
Ballast water	PM1GNVT_PBZA	PM1GNVT_PBZB	PM1GNVT_PEZA	PM1GNVT_PEZB
Cooling sea water	PM1GNYE_PBZA	PM1GNYE_PBZB	PM1GNYE_PEZA	PM1GNYE_PEZB
OILS OTHER THAN FUEL	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
Thermal fluid	PM2OGBU_PBZA	PM2OGBU_PBZB	PM2OGBU_PEZA	PM2OGBU_PEZB
Lubrication oil for gas turbines	PM2OGGN_PBZA	PM2OGGN_PBZB	PM2OGGN_PEZA	PM2OGGN_PEZB
Hydraulic fluid	PM2OGGY_PBZA	PM2OGGY_PBZB	PM2OGGY_PEZA	PM2OGGY_PEZB
Lubrication oil for steam turbines	PM2OGSR_PBZA	PM2OGSR_PBZB	PM2OGSR_PEZA	PM2OGSR_PEZB
Lubrication oil for gears	PM2OGVT_PBZA	PM2OGVT_PBZB	PM2OGVT_PEZA	PM2OGVT_PEZB
Lubr. oil for internal combustion engines	PM2OGYE_PBZA	PM2OGYE_PBZB	PM2OGYE_PEZA	PM2OGYE_PEZB
Thermal fluid	PM1OGBU_PBZA	PM1OGBU_PBZB	PM1OGBU_PEZA	PM1OGBU_PEZB
Lubrication oil for gas turbines	PM1OGGN_PBZA	PM1OGGN_PBZB	PM1OGGN_PEZA	PM1OGGN_PEZB
Hydraulic fluid	PM1OGGY_PBZA	PM1OGGY_PBZB	PM1OGGY_PEZA	PM1OGGY_PEZB
Lubrication oil for steam turbines	PM1OGSR_PBZA	PM1OGSR_PBZB	PM1OGSR_PEZA	PM1OGSR_PEZB
Lubrication oil for gears	PM1OGVT_PBZA	PM1OGVT_PBZB	PM1OGVT_PEZA	PM1OGVT_PEZB
Lubr. oil for internal combustion engines	PM1OGYE_PBZA	PM1OGYE_PBZB	PM1OGYE_PEZA	PM1OGYE_PEZB
ALL WAS ALL VIOLENCE BY TO SERVICE BY				
FLAMMABLE GASES	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
Hydrogen				PM2YEBU_PEZB
Acetylene				PM2YEGY_PEZB
Liquid gas		PM2YEVT_PBZB	PM2YEVT_PEZA	PM2YEVT_PEZB
Hydrogen			- 150	PM1YEBU_PEZB
Acetylene Liquid gas	PM1YEGY_PBZA PM1YEVT_PBZA	PM1YEGY_PBZB PM1YEVT_PBZB	PM1YEGY_PEZA PM1YEVT_PEZA	PM1YEGY_PEZB PM1YEVT_PEZB
C F F C C C C C C C C C C C C C C C C C	Condensate Fresh water, sanitairy Potable water Distillate Gas-turbine wash water Freed water Cooling fresh water Chilled water Condensate  SEA WATER Decontamination water Sea water, sanitairy Ballast water Cooling sea water Decontamination water Sea water, sanitairy Ballast water Cooling sea water Decontamination water Sea water, sanitairy Ballast water Cooling sea water DILS OTHER THAN FUEL Thermal fluid Lubrication oil for gas turbines Hydraulic fluid Lubrication oil for gears Lubr. oil for internal combustion engines Thermal fluid Lubrication oil for gas turbines Hydraulic fluid Lubrication oil for gas turbines Hydraulic fluid Lubrication oil for gas turbines Hydraulic fluid Lubrication oil for gears Lubr. oil for internal combustion engines Thermal fluid Lubrication oil for gears Lubr. oil for internal combustion engines Thermal fluid Lubrication oil for gears Lubr. oil for internal combustion engines Thermal fluid Lubrication oil for gears Lubr. oil for internal combustion engines Lubr. oil for internal combustion engines TLAMMABLE GASES Hydrogen Acetylene Liquid gas Hydrogen	Condensate  PM2BUYE_PBZA Fresh water, sanitairy  PM1BUBN_PBZA PM1BUGN_PBZA  PM1BUGN_PBZA  PM1BUGN_PBZA  PM1BUGN_PBZA  PM1BUG_PBZA  Gas-turbine wash water  PM1BUSR_PBZA  Cooling fresh water  Cooling fresh water  PM1BUWH_PBZA  Condensate  PM1BUYE_PBZA  Condensate  PM2GNBU_PBZA  SEA WATER  Decontamination water  Decontamination water  Decontamination water  PM2GNBU_PBZA  Cooling sea water  PM2GNYE_PBZA  Decontamination water  PM1GNBU_PBZA  Decontamination water  PM2GGN_PBZA  Decontamination water  PM2GGN_PB	Condensate PM2BUYE_PBZA PM2BUYE_PBZB Fresh water, sanitairy PM1BUBN_PBZA PM1BUBN_PBZB Distillate PM1BUGN_PBZA PM1BUGN_PBZB Distillate PM1BUGN_PBZA PM1BUGN_PBZB Gas-turbine wash water PM1BUGS_PBZA PM1BUGS_PBZB Gas-turbine wash water PM1BUGS_PBZA PM1BUGS_PBZB Feed water PM1BUSR_PBZA PM1BUSR_PBZB Cooling fresh water PM1BUVT_PBZA PM1BUVT_PBZB Cooling fresh water PM1BUVT_PBZA PM1BUVT_PBZB Chilled water PM1BUVT_PBZA PM1BUVT_PBZB Condensate PM1BUVT_PBZA PM1BUVT_PBZB  SEA WATER BASIC 100mm BASIC 150mm Decontamination water PM2GNBU_PBZA PM2GNBU_PBZB Ballast water PM2GNVT_PBZA PM2GNBU_PBZB Ballast water PM2GNVT_PBZA PM2GNVT_PBZB Cooling sea water PM2GNVT_PBZA PM2GNVT_PBZB Decontamination water PM1GNBU_PBZA PM1GNBU_PBZB Ballast water PM1GNBU_PBZA PM2GGBU_PBZB Ballast water PM1GNBU_PBZA PM2GGBU_PBZB Ballast water PM1GNBU_PBZA PM2GGBU_PBZB Ballast water PM1GNBU_PBZA PM2GGBU_PBZB Ballast water PM1GNBU_PBZA PM1GGBU_PBZB Ballast water PM1GNBU_PBZA PM2YEBU_PBZB Ballast water PM1YEBU_PBZA PM2YEBU_PBZB Ballast	Condensate PM2BUYE_PBZA PM2BUYE_PBZB PM2BUYE_PEZA Fresh water, sanitairy PM1BUBN_PBZA PM1BUBN_PBZB PM1BUBN_PEZA Potable water PM1BUGN_PBZA PM1BUGN_PBZB PM1BUGN_PEZA PM1BUGN_PBZA PM1BUGN_PBZB PM1BUGN_PEZA Grastwrbine wash water PM1BUGY_PBZA PM1BUGY_PBZB PM1BUGY_PEZA Grastwrbine wash water PM1BUGY_PBZA PM1BUGY_PBZB PM1BUGY_PEZA Freed water PM1BUVE_PBZA PM1BUGY_PBZB PM1BUGY_PEZA Cooling fresh water PM1BUVY_PBZA PM1BUGY_PBZB PM1BUSR_PEZA Cooling fresh water PM1BUVY_PBZA PM1BUVY_PBZB PM1BUY_PEZA Condensate PM1BUVY_PBZA PM1BUVY_PBZB PM1BUVY_PEZA Condensate PM1BUYE_PBZA PM1BUVY_PBZB PM1BUYY_PEZA Condensate PM2GNBU_PBZA PM1BUYY_PBZB PM1BUYY_PEZA Cooling sea water PM2GNBU_PBZA PM2GNBU_PBZB PM2GNBU_PEZA Balast water PM2GNBU_PBZA PM2GNBU_PBZB PM2GNBU_PEZA Cooling sea water PM2GNBU_PBZA PM2GNBU_PBZB PM2GNBU_PEZA Decontamination water PM1GNBU_PBZA PM1GNBU_PBZB PM2GNBU_PEZA Cooling sea water PM2GNYE_PBZA PM1GNBU_PBZB PM2GNBU_PEZA Cooling sea water PM1GNBU_PBZA PM1GNBU_PBZB PM1GNBU_PEZA Decontamination water PM1GNBU_PBZA PM1GNBU_PBZB PM1GNBU_PEZA Cooling sea water PM1GNBU_PBZA PM1GNBU_PBZB PM1GNBU_PBZB PM1GNBU_PBZB Cooling sea water PM1GNBU_PBZA PM2GGBU_PBZB PM1GGBU_PBZA PM1GGBU_PBZB PM1GGBU_PBZB PM1GGBU_PBZA PM1GGBU_PBZB PM1GGBU_PBZB PM1GGBU_PBZA PM1GGBU_PBZB PM1GGBU_PBZB PM1GGBU_PBZA PM1GGBU_PBZB PM



FIRE-FIGHTING/FIRE PROTECTION	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mn
Fire-fighting water	PM2RDGN_PBZA	PM2RDGN_PBZB	PM2RDGN_PEZA	PM2RDGN_PEZB
Fire-fighting gas	PM2RDGY_PBZA	PM2RDGY_PBZB	PM2RDGY_PEZA	PM2RDGY_PEZB
Sprinkler water	PM2RDOG_PBZA	PM2RDOG_PBZB	PM2RDOG_PEZA	PM2RDOG_PEZB
Spray water	PM2RDVT_PBZA	PM2RDVT_PBZB	PM2RDVT_PEZA	PM2RDVT_PEZB
Fire-fighting powder	PM2RDWH_PBZA	PM2RDWH_PBZB	PM2RDWH_PEZA	PM2RDWH_PEZB
Fire-fighting foam	PM2RDYE_PBZA	PM2RDYE_PBZB	PM2RDYE_PEZA	PM2RDYE_PEZB
Fire-fighting water	PM1RDGN_PBZA	PM1RDGN_PBZB	PM1RDGN_PEZA	PM1RDGN_PEZB
Fire-fighting gas	PM1RDGY_PBZA	PM1RDGY_PBZB	PM1RDGY_PEZA	PM1RDGY_PEZB
Sprinkler water	PM1RDOG_PBZA	PM1RDOG_PBZB	PM1RDOG_PEZA	PM1RDOG_PEZB
Spray water	PM1RDVT_PBZA	PM1RDVT_PBZB	PM1RDVT_PEZA	PM1RDVT_PEZB
Fire-fighting powder	PM1RDWH_PBZA	PM1RDWH_PBZB	PM1RDWH_PEZA	PM1RDWH_PEZB
Fire-fighting foam	PM1RDYE_PBZA	PM1RDYE_PBZB	PM1RDYE_PEZA	PM1RDYE_PEZB
NON FLAMMARIE CACCEC	DACIC 100	DACIC 150	ECONOMY 100	CONOMY 150
NON-FLAMMABLE GASSES	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mr
Discharge air	PM2WHBL_PBZA	PM2WHBL_PBZB	PM2WHBL_PEZA	PM2WHBL_PEZB
Mechanical supply air, cold	PM2WHBU_PBZA	PM2WHBU_PBZB	PM2WHBU_PEZA	PM2WHBU_PEZB
Natural exhaust air	PM2WHBN_PBZA	PM2WHBN_PBZB	PM2WHBN_PEZA	PM2WHBN_PEZB
Atmospheric air	PM2WHGN_PBZA	PM2WHGN_PBZB	PM2WHGN_PEZA	PM2WHGN_PEZE
Mechanical exhaust air	PM2WHGY_PBZA	PM2WHGY_PBZB	PM2WHGY_PEZA	PM2WHGY_PEZB
Decontaminated supply air	PM2WHMN_PBZA	PM2WHMN_PBZB	PM2WHMN_PEZA	PM2WHMN_PEZE
Mechanical recirculated air	PM2WHOG_PBZA	PM2WHOG_PBZB	PM2WHOG_PEZA	PM2WHOG_PEZE
Mechanical supply air warm	PM2WHSR_PBZA	PM2WHSR_PBZB	PM2WHSR_PEZA	PM2WHSR_PEZB
Smoke clearance	PM2WHRD_PBZA	PM2WHRD_PBZB	PM2WHRD_PEZA	PM2WHRD_PEZB
Conditioned supply air	PM2WHVT_PBZA	PM2WHVT_PBZB	PM2WHVT_PEZA	PM2WHVT_PEZB
Natural supply air	PM2WHYE_PBZA	PM2WHYE_PBZB	PM2WHYE_PEZA	PM2WHYE_PEZB
Discharge air	PM1WHBL_PBZA	PM1WHBL_PBZB	PM1WHBL_PEZA	PM1WHBL_PEZB
Mechanical supply air, cold	PM1WHBU_PBZA	PM1WHBU_PBZB	PM1WHBU_PEZA	PM1WHBU_PEZB
Natural exhaust air	PM1WHBN_PBZA	PM1WHBN_PBZB	PM1WHBN_PEZA	PM1WHBN_PEZB
Atmospheric air	PM1WHGN_PBZA	PM1WHGN_PBZB	PM1WHGN_PEZA	PM1WHGN_PEZE
Mechanical exhaust air	PM1WHGY_PBZA	PM1WHGY_PBZB	PM1WHGY_PEZA	PM1WHGY_PEZB
Decontaminated supply air	PM1WHMN_PBZA	PM1WHMN_PBZB	PM1WHMN_PEZA	PM1WHMN_PEZE
Mechanical recirculated air	PM1WHOG_PBZA	PM1WHOG_PBZB	PM1WHOG_PEZA	PM1WHOG_PEZE
Mechanical supply air warm	PM1WHSR_PBZA	PM1WHSR_PBZB	PM1WHSR_PEZA	PM1WHSR_PEZB
Smoke clearance	PM1WHRD_PBZA	PM1WHRD_PBZB	PM1WHRD_PEZA	PM1WHRD_PEZB
Conditioned supply air	PM1WHVT_PBZA	PM1WHVT_PBZB	PM1WHVT_PEZA	PM1WHVT_PEZB
Natural supply air	PM1WHYE_PBZA	PM1WHYE_PBZB	PM1WHYE_PEZA	PM1WHYE_PEZB
STEAM	BASIC 100mm	BASIC 150mm	ECONOMY 100mm	ECONOMY 150mm
Steam for heating purposes	PM2SRBK_PBZA	PM2SRBK_PBZB	PM2SRBK_PEZA	PM2SRBK_PEZB
Driving steam	PM2SRGN_PBZA	PM2SRGN_PBZB	PM2SRGN_PEZA	PM2SRBK_PEZB
Exhaust system	PM2SRWH_PBZA	PM2SRWH_PBZB	PM2SRWH_PEZA	PM2SRWH_PEZB
Supply steam	PM2SRYE_PBZA	PM2SRYE_PBZB	PM2SRYE_PEZA	PM2SRYE_PEZB
Steam for heating purposes	PM1SRBK_PBZA	PM1SRBK_PBZB	PM1SRBK_PEZA	PM1SRBK_PEZB
Driving steam	PM1SRGN_PBZA	PM1SRGN_PBZB	PM1SRGN_PEZA	PM1SRBK_PEZB
Exhaust system	PM1SRWH_PBZA	PM1SRWH_PBZB	PM1SRWH_PEZA	PM1SRWH_PEZB
Supply steam	PM1SRYE_PBZA	PM1SRYE_PBZB	PM1SRYE_PEZA	PM1SRYE_PEZB



### **POLYESPRO® PIPE MARKING**

We are supplier of the specially developed PolyesPro® pipe markings. This product is the highest available quality pipe marking and has a better temperature resistance, therefore a longer service life and improved colourfastness. The tape comes with all the usual 3M<sup>TM</sup> guarantees. PolyesPro® pipeline markings are made out of two layers; a PVC free polyester base material with the image, finished with a protective laminate. As a result, the material is suitable for insulated pipes, painted pipes and stainless steel pipes.

### **Benefits of PolyesPro®:**

- UV-resistant
- Scratch-resistant
- Usable in extreme weather condition
- Withstand chemicals
- Strong adhesive
- Greater thickness
- Temperature resistance -40 °C up to +130 °C







# PRECOILED PIPE MARKERS REMOVABLE POLYESPRO® PIPE MARKING

Removable PolyesPro® Pipe Marking film is a high performance non-PVC polyester sandwich, manufactured according to 3M<sup>TM</sup> production specifications, for the marking of pipes and pipeline systems. With a 3M<sup>TM</sup> base polyester material printed with LED UV Inkjet on a 3M<sup>TM</sup> Configured Printer and a 3M<sup>TM</sup> Protective Laminate, this Pipe Marking product can be used in demanding environments, and with a long expected lifetime. Legends can include warning signs, GHS symbol, pipe origin and destination, line number, QR and bar codes in addition to pipe contents.

The PreCoiled pipe markers allow for very quick installation aboard ships, platforms and industrial plants.

This product features a high-quality adhesive strip for fast and effective wrapper attachment.



### **Benefits of PreCoiled pipe markers**

- Developed for general purpose pipe identification harsh conditions for application in maritime, offshore, petrochemical & refinery industry
- Can be used on dirty, oily, greasy or rough surfaced piping systems
- Meets various Standards like ISO 20560, DIN, ASME / ANSI Standard, BSI, etc.
- Precoiled PolyesPro® pipe markers are UV resistant , durable and can be replaced and reused.









# SAFETY SIGNAGE IMPLEMENTATION AND CERTIFICATION

Development and installation of an effective and compliant safety signage system has been our core business for many years. Whether it is on a cruise ship, ferry, oil rig, container ship or tanker, the safety of the crew and passengers is our top priority when implementing such a system.

Our safety signage portfolio consists of:

- Escape Route signage (including Low Location Lighting)
- Safety plans / Safety instruction signs
- Fire & Rescue signage
- Fire Control signage
- Warning / Prohibition / Mandatory signs
- Pipe marking
- ISPS signs

In order to implement an effective and compliant safety signage system, we approach each project systematically, based on our main pillar under success: good projectmanagement and knowledge of regulations and standards.

### **Project management**

Our organization and teams have the knowledge and experience to successfully manage complex, time-sensitive safety signage and Low Location Lighting projects



in line with your embarkation- and safety plan and safety procedures. Our time-tested techniques serve as an industry model, and our people represent the best in the safety signage business.

Once the scope, tasks and milestones are determined, a dedicated Project Manager is appointed to lead the project and act as the primary contact throughout the life of the project. Project team members are assembled from engineering, drawing, production and installation departments.

The steps we take to ensure the most optimal project result, are based on years of experience and can be considered a best practice to deliver an effective and efficient safety signage system:

- Site survey
- Budgeting
- Engineering & Design
- Production
- Class approved drawings
- Installation
- Low Location Lighting installation, measurements and class-approval guidance\*
  - Photoluminescent Low Location Lighting
  - Electrical Low Location Lighting
  - As-built signmanual
- Maintenance

\*In case of newbuild ships, we can provide the delivery documentation and certification documents for approval by the classification society.

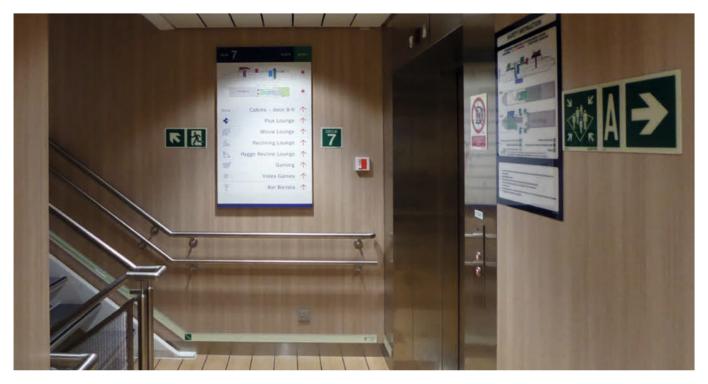
### Site survey

Most of the times, we progress based on the ship's General Arrangement drawings, fire control & safety plans or embarkation plans\* and no site survey is needed to create a preliminary sign plan.

If a site survey is needed, we evaluate the current status of your existing signage. Evaluation of all or individual on-board signage areas: safety, technical, crew and pax. This survey will be accompanied by a detailed technical illustrative report: a sign plan. With this survey, we can assess and evaluate the current state of the safety signage system related to relevant IMO resolutions and ISO standards, listing all the findings in the sign plan. In our report, we not only look at the technical state of the signage, but we also report on the state of the signage in terms of compliance with regulations and standards that are applicable in your situation.

\*In case your ship or offshore location does not have any fire control & safety plan or embarkation plan, we can develop it for you.





### **Budgeting**

Based on the customer's requirements, and after a close study of the general arrangement drawings, fire control & safety plans or embarkation plans (and results from the site survey when applicable) it is possible to determine what the scope of the project is. We can now make an estimation of the impact and costs involved to implement an effective safety signage system or escape route signage system. Such a system ideally consists of 5 elements that together form the system:

- Low Location Lighting, including signs
  - Photoluminescent Low Location Lighting
  - Electrical Low Location Lighting
- High located Escape signage indicating how to reach the assembly stations and embarkation stations
- Electrical escape signs
- Safety Instructions for passengers and crew (in the cabins and public areas)
- Other safety signs installed at eye level for fire fighting, rescue, fire control, damage control, etc. cardeck safety signage for passengers and other safety signage for safe work of crew

Our way of engineering will always try to avoid an 'overload' of signs, as such an overload of signs does not improve the feeling of safety onboard a ship.

### **Engineering & Design**

Our engineering services include various activities in order to produce a signplan. Based on the available general arrangement drawings and/or results from a site survey we create a signplan, which is developed in accordance with current regulations and standards. In the end, the sign plan provides a clear overview

of any present and required safety signage onboard your ship according to regulations and standards. This allows you to be in control of the safety signage on your ship or offshore location. A sign plan opens the opportunity to partake in the design process before the safety signage becomes permanent. This workflow guarantees a uniform appearance and an efficient and practical implementation of all safety signage.

Years of experience in compiling safety sign systems allows us to survey and map even the most complex locations and installations with competency and efficiency.

Our design services will make sure to follow any branding guidelines when designing the non-standard signage elements (signage that has your logo on it) on your ship or offshore location.

### **Production**

In our own certified SafeSign production facilities, with modern equipment and the manpower we execute production for your largest projects. All standard signs we have on stock for flexible and fast service.

Staffed by highly skilled talent, we have two state-of-the-art manufacturing locations in the Netherlands. We are experts at maximizing efficiency, and have the flexibility to adapt our production processes to match the demands and specifications of your program.

As part of our rigorous quality control measures, all products are inspected at our facilities. Since the majority of our products are constructed in-house, we can assure product quality, no matter the design, or how



many signs you require. Because of our focus on long life quality signage products, you can be assured of a lower Total Cost of Ownership of our signage vs. low cost, low quality signage that is available on the market today. When we deliver a safety signage project to you, you can be sure to be maintenance-free for the foreseeable future. T-ISS is an ISO 9001 Certified company, as certified by DNV. DNV previously certified many of our products, and now DNV also certified our processes, in accordance with the ISO 9001 international standard.

Next to our ISO 9001 certificate that we own for our organization, our safety signage products are certified as well:

- IMO safety signs DNV
- Low Location Lighting (photoluminescent and electrical) DNV
- Pipe marking PolyesPro®, a pipe marking vinyl that was jointly developed with 3M
- SOLAS Retro Reflective tape DNV

### Installation

In order to implement the sign plan on your ship(s), an experienced installation team is dispatched to a location to complete all required work. Our installation teams have the capability to service you anywhere in the world. Teams arrive at your ship or offshore location equipped with the information gathered from the survey and sign plan, assuring that they have all the required equipment and tools needed to complete the job to your satisfaction. Along with the site-specific information, installation teams are advised of the customers installation expectation that include quality wall

ORSKOV YARD

repair, cleanliness of installed products, and maintenance of safe and clean work area. In case of the use of local installation teams, we can provide installation supervision.



### Class approvals

When T-ISS did the complete project we guarantee the approvals for relevant authorities. With our expertise based on years of experience and participation in ISO committees for safety signage we guide our customers through the entire classification process. T-ISS is fully certified to take the LLL measurements, so together with the certified products we fulfill all necessary tasks for certification of the whole safety sign system in compliance with embarkation plan, fire control plan and all relevant regulations and standards.

### **Maintenance**

After implementation/installation, the sign plan serves as a reference and as a basis for future maintenance of all signage. We understand the importance of regular maintenance and repairs, and offer various maintenance contracts to keep your signage looking at its best. If you have invested in high-quality signage, it makes sound business sense to ensure that it is kept in good condition, to maintain its visual impact and safety.

Maintenance of photoluminescent Low Location Lighting is to be performed every 5 years, by testing all systems. Our engineers are able to test your LLL systems onboard with fully certified test equipment and procedures, as certified by DNV.





### MARITIME INTERIOR DECORATION

What many companies and interior designers do not yet know is that vinyl/foil has a huge range of applications. Vinyl is often still associated with the application for advertising purposes such as lettering or loose stickers. Nowadays, however, the possibilities go much further than that. The possibilities of decoration and renovation of both interior and exterior of vessels and buildings with self-adhesive vinyl are almost endless. Specifically we focus on applications that are used for long term use and immediately provide an added value in terms of decoration or branding.



### Self-adhesive films can be used everywhere

Whereas previously vinyls were mainly used for flat and smooth surfaces such as plates, panels and glass parts, films are now also becoming increasingly suitable for use on more difficult substrates such as weathered aluminum or plastic window frames or façade panels. The possibilities and applications of Self-adhesive films have therefore increased significantly in recent years. Our supplier, partner and film manufacturer  $3M^{TM}$  is one of the main drivers behind this development. With products such as DI-NOC<sup>TM</sup>, Fasara<sup>TM</sup> and Envision<sup>TM</sup>, 3M have brought products in recent years that are of very high quality and are sustainable products that are specifically suitable for decoration and renovation applications.

### Colour and imagery reduce stress

Several studies have shown that the use of colour and imagery in the interior of ships, offices and other working environments has a direct influence on the labor productivity in the workplace. With vinyl coverings, complete walls can be decorated with a complete full-colour print in one go. Even so that windows and doors completely "disappear" into the background because doors and window frames can also be decorated with printed film.



### MARITIME INTERIOR DECORATION



# Designing the perfect ship interior using 3M finishes

Designing the perfect ship interior can be a balancing act between creating a warm and welcoming ambiance that feels like home and also imbue an element of surprise that makes your guests feel special. DI-NOC<sup>TM</sup> vinyl surface finishes include a wide range of innovative patterns and colours that provide many opportunities to decorate or refresh spaces while blending in with the existing decor.

Cruise ships or living quarters on a vessel also aim at making a striking first impression and what better space than the ship's gangways or cabins to make a lasting impression on guests or visitors.

Besides their aesthetic value, these surface finishes are durable, with strong adhesion, allowing your interior to be furnished to the highest possible standard. Existing furnishings can be kept and renewed rather than replaced, meaning you can redesign your ships' general areas or corridors in minimal time and cost, without compromising on quality and style.

### Incorporate the latest trends with Architectural Finishes

With the addition of 153 new patterns that incorporate the latest trends, 3M<sup>TM</sup> DI-NOC<sup>TM</sup> Architectural Finishes are now available in more than 800 different designs, enabling almost infinite creativity. Our rich assortment of finishes offers the warmth of wood grain, the texture of traditional Japanese washi paper, abstract designs inspired by nature, and many other interior and exterior design possibilities.

We have years of experience in the design, production and installation of interior decoration and signage and have worked with many interior architects to get the optimal result.

If you are interested in working with us to bring your interior décor plans to life with 3M vinyls, please contact us.





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