# INSTALLING THE SAFETY RAIL ON A SEAM METAL ROOF

INSTALLATION GUIDE

EN 795:2012, EN 517:2006

#### **BEFORE INSTALLATION**

Please read the installation guide carefully. The location of the safety rail must be planned in such a way that the working area is on the side of the safety rail and below the open side and safety rail. Please ensure that the maximum loading angle is not exceeded f.ex. near the edge of the roof.

When attaching the safety rail to a seam metal roof using Orima® standing seam fastener, the roof fastening is compliant with strength class 2 (EN 516).

#### INSTALLATION

- Install the standing seam fasteners (1) to the roof at a maximum distance 1200 mm from one another.
- Install the attachment pieces (5) to the rail. Use at least three attachment pieces per rail segment.
- Attach the carriage blockers to the rail. Always use carriage blockers to the ends of the rail lines so that the horizontal rail carriage does not slip off the rail. A carriage blocker that can be opened (3) allows the carriage to be removed from the rail line; a fixed one (4) does not.
- Attach the rail to the standing seam fasteners with the attachment piece (5).

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• Extend the safety rail using extension pieces 6). Shorten the rail if necessary.

A type plate (15) with the appropriate information shall be placed in a visible location near the safety rail.

SAFETY RAIL 33800 Length 3 m

-	105-11
100	46
10	
3	48

		Product	PHK3012 PHKL12	
No.	Part	no.	pcs.	pcs.
1	Safety rail 3.0 m	33800	1	
2	Horizontal rail carriage	33850		
3	Detachable carriage blocker	33810		
4	Fixed carriage blocker	33820		
5	Safety rail attachment piece for seam fastener	33290	4	]
6	Safety rail extension set	33840		c
7	Hexagon socket head screw M10x20 RST	33934	4	]
8	Hexagon nut M10 RST	17374	4	] -
9	Hexagon screw M10x65 RST	33964		-
10	Self-locking hexagon nut M10 RST	33924		
11	Standing seam fastener set C2	35820	4	
12	Hexagon screw M8x16 HOT	17031	8	2. 2.
13	Hexagon nut M8 HOT	17021	8	2
14	Washer 13/24 RST	17984	4	
15	Type plate for the horizontal rail system	33910		

### PHK3012 PHKL12

3



HORIZONTAL

RAIL CARRIAGE 33850

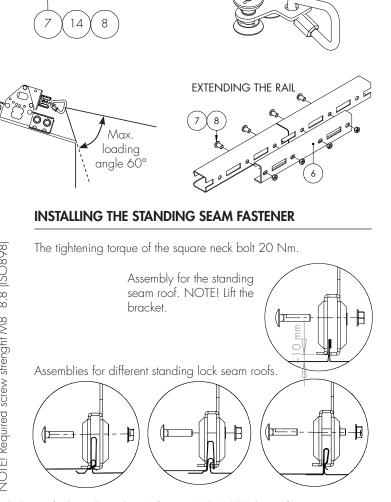
IMPLEMENTATION INSPECTION MUST BE PERFORMED BEFORE USING THE HORIZONTAL SAFETY RAIL SYSTEM.

The Orima® horizontal rail carriage 33850 may only be used in connection with the Orima® safety rail when the rail is installed on the horizontal level on the roof.

Max. 1200 mm

15

13



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# HORIZONTAL SAFETY RAIL SYSTEM

## USER'S GUIDE

EN 795:2012

The Orima® horizontal rail carriage and safety rail are used in connection with rooftop access routes to provide protection for maintenance work carried out on sloping and slippery surfaces and to prevent falls.

Do not use the safety rail and horizontal rail carriage for lifting and moving goods and devices. Instead, always use safety systems designed specifically for these purposes.

Use of the system in other ways than those indicated in the manufacturer's instructions is strictly prohibited.

#### **BEFORE EACH USE**

The user must read these instructions before using the systems and be familiar with the use of fall protection devices.

Before each use, the user must conduct a visual inspection to ensure the following:

The safety harness and safety rope are undamaged and in good condition, and

- The safety harness is a standard EN 361-compliant full-body harness
- The safety rope must be a rope that is officially approved for use as a safety rope (EN 354) or an officially approved combination of rope and fall arrester (EN 353-2).
- The full-body harness may not be loose, it must be adjusted to fit the user.
- Use only standard EN 362-compliant additional connecting pieces.

The horizontal rail carriage and safety rail must be intact and in good condition.

- The safety rail and the attaching structures (roof brigde, roof, wall or roofing material) are unbrokened, entire and reliably fastened.
- The screws on the mounts and extensions of the horizontal rail must be properly fastened.
- The indications on the horizontal rail system must be legible *(image 4 and 5).*

If you notice any deficiencies or are unsure about the condition of the system, you must notify the party in charge of its maintenance in writing. Before use, any observed defects must be corrected.

Plan rescue operations in case of an accident before each use. Rescue measures must be in place and quickly available if there is an issue with the use of the system.

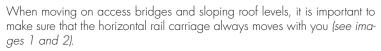
Maximum user weight incl. equipment	120 kg
Lowest use temperature	–25 °C
Number of users/horizontal rail carriage	1 person
Distance between each user	over 3 m

#### **USER'S GUIDE**

Connect the safety rope to the hook on the horizontal rail carriage. Only one user may be connected to the horizontal rail carriage.

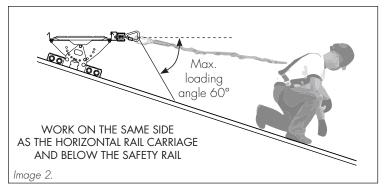
If the horizontal rail carriage is not connected to the safety rail, raise the lever on the moveable carriage blocker and slide the horizontal rail carriage into the safety rail. Close the carriage blocker by letting the lever move back downwards.

The safety rope must always be tight. The length of the rope must never be such that it enables falling from the edge of the roof. When using the safety rope, please ensure that the rope does not rub against any sharp edges or become otherwise damaged.

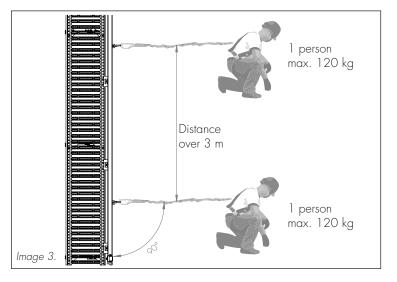




Work should be carried out on the same side as the horizontal rail carriage when looking from the roof bridge, and below the safety rail *(image 2)*.



The safety rope must always be perpendicular (90°) to the safety rail. If there are several horizontal rail carriages and users on one safety rail, the distance between the carriages must always be at least 3 metres. *(image 3.)* 



If the system is installed in a location in such a way that the carriage must be detached from the rail or the safety rope from the carriage in order to move to the next rail, the user must exercise extreme caution. If possible, the transfer of the carriage from one rail to the other should be planned in such a way that the user can connect to another safety rope for the duration of the transfer.



## HORIZONTAL SAFETY RAIL SYSTEM

MAINTENANCE GUIDE

EN 795:2012

#### MAINTENANCE AND STORAGE GUIDE

Protect all parts of the system from sparks, damage from tools and chemical splashes.

Self-repair of the horizontal rail carriage or safety rail is strictly prohibited. Any broken parts must be replaced. It is prohibited to make changes to the system or replace parts with replacements other than those approved by the manufacturer.

#### Horizontal rail carriage

The stainless steel horizontal rail carriage will remain in operating condition when stored in place on the horizontal rail. If the horizontal rail carriage is stored elsewhere, the inspection card and user's guide must be stored in the same place. The expected lifespan of a horizontal rail carriage is around 15 years.

#### Safety rail

The powder-coated safety rail remains in operating condition without special maintenance. The average expected lifespan of Orima-Tuote Ltd's powder-coated products is 30 years. The lifespan depends on the rate of use, maintenance and environmental factors (pollution, maritime climate, etc.).

#### **GENERAL SAFETY INSTRUCTIONS**

The health and work ability of the user can affect the safety of use of the system. If you are uncertain about your health or work ability, check with a physician to make sure you are fit for work in high places before using the system.

#### SIGNS AND LABELS

#### Horizontal rail carriage

The horizontal rail carriage is marked with a permanent identifier:

- the product number and manufacturing batch of the carriage (e.g. 33850 0117)
- standard EN795:2012

the sliding direction
instructions to read the user's guide II.
Image 4.

#### Type plate

A type plate shall be placed in a visible location near the safety rail. Fullfill the type plate with the appropriate information:

• Installation date (month and year)



Image 5.

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#### INSPECTIONS

All inspections must be carried out by a person appointed by the manufacturer. An inspection card must be kept with information about each inspection. The inspection card must be stored carefully.

If any wear and tear or damages to the horizontal rail carriage or safety rail are observed during regular inspection or use of the system, or if you are uncertain about the safety of the system, the use of the system must be stopped and you must contact the manufacturer or the manufacturer's representative in order to arrange repairs.

#### Implementation inspection

After installation or repair work, an implementation inspection must be carried out on the horizontal rail carriage and safety rail. The inspection confirms that the installation has been carried out according to the instructions.

#### **Regular inspections**

The safety rail system must be inspected annually every 12 months and always immediately after a notification from a user regarding a deficiency or defect before the previous use.

#### Content of the inspections

In the inspections, the functionality of the system should be reviewed as follows:

#### Horizontal rail carriage and its functionality:

- no mechanical damages or damages caused by corrosion are observed on the horizontal rail carriage.
- The mobility of the horizontal rail carriage is tested for the entire length of the rail system.

#### Safety rail and attachment structures

- The safety rail mounts as well as the roof bridge, roof mounts and fastening are in good condition and the screws are tight
- No mechanical damage or damage caused by corrosion is observed in the system.
- The screws on the extensions of the safety rail are tight.
- The opening and fixed carriage blockers at the ends of the safety rail are functional and in good condition.
- The indications on the type plate for the safety rail are legible *(image 4).*

If the inspection reveals any deviations, major wear or damage, the system must be removed from use and the deficiencies corrected immediately.

Do not use a system that has not been inspected or that is defective. Regular inspections ensure user safety.

#### IF THE SYSTEM HAS BEEN USED TO STOP A FALL, ITS USE IS PRO-HIBITED.

Contact the manufacturer or the manufacturer's representative in order to arrange the repair of the system.

#### APPROVALS AND QUALITY CONTROL

The horizontal rail carriage and safety rail have been tested according to the EN 795:2012 standard.

The horizontal rail is not a CE-labelled product.



# HORIZONTAL SAFETY RAIL SYSTEM

INSPECTION CARD



## **PRODUCT INFORMATION**

	Product no.	Quantity, pcs.	Date of purchase	Batch code
HORIZONTAL RAIL CARRIAGE	33850			
SAFETY RAIL 3 m	33800			
DETACHABLE CARRIAGE BLOCKER	33810			
FIXED CARRIAGE BLOCKER	33820			

### **CONTACT INFORMATION**

Manufacturer	<b>ORIMA-TUOTE OY</b> Kankaantie 6, Fl-16300 Orimattila, Finland www.orima.fi Tel. +358 (3) 872 100	Installer
Retailer		Customer, Property location

### **INSTALLATION DETAILS**

Installation date	Installer's signature
Person in charge of the system:	

## **INSTALLATION METHOD**

I C II	
To the roof walkway	
To me roor walkway	

To the wall

To the standing seam roofing

# **INSPECTIONS**

Regular inspections every 12 months An implementation inspection must always be carried out after the use of the system has been prohibited or if parts have been replaced. All inspections must be carried out by a person appointed by the manufacturer according to the manufacturer's instructions.

Implementation inspection	Regular inspection	Inspection date	Inspector	Measures	Next inspection

