



SWAL[®]

Since 1998

LAX[®]

reduce thermic bridge
in cold stores

available
in RAL
colours

gas
tight

available with
screws
for concrete
and wood

work temperature
from -40°C
up to +85°C

moutage
time 30 s.!

washer
EPDM



www.swal.eu

Fasteners for cold stores

EN

TECHNICAL INFORMATION

The LAX fastener manufactured by the company SWAL® since 2008 has been specially designed for installation of sandwich panels in cold stores and freezers with a constant working temperature from -40° C of up to +85°C, an admissible instantaneous temperature from -50 to +120° C. LAX reduces the phenomenon of thermal bridge and eliminates the effect of water condensation occurring on stainless steel A2, A4 and carbon steel screws (so-called steel screws). Both in objects with controlled atmosphere, cold stores and freezers, an EPDM gasket must be used for sealing.

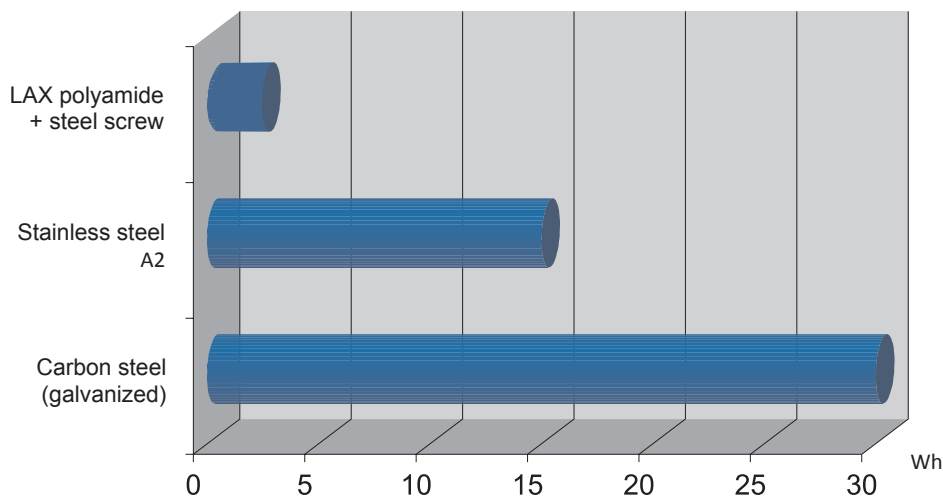
Due to design and strength reasons, only SWAL screws may be used to work with the LAX bushing. The selection of screw length and type should be made according to the type of the substrate and the thickness of the sandwich panel.

LAX can be mounted on the edge of the sandwich panel. It has twice the design load capacity NRD than the self-drilling screws with EPDM washer with a diameter of 19 mm, which when installing a sandwich panel with dark facings allows you to use twice less connectors.

Computational load capacity Nru*	1,97 kN
Destructive force NRU	4,50 kN

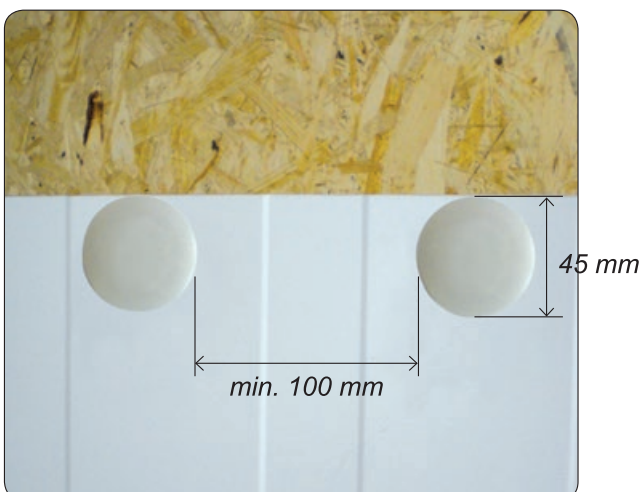
* N_{RD} computational capacity for pulling the screw head in the LAX sleeve at the PIR sandwich panel with 0.5 mm thick sheet.

GRAPH OF THERMAL CONDUCTIVITY FOR CONNECTORS MADE FROM DIFFERENT MATERIALS

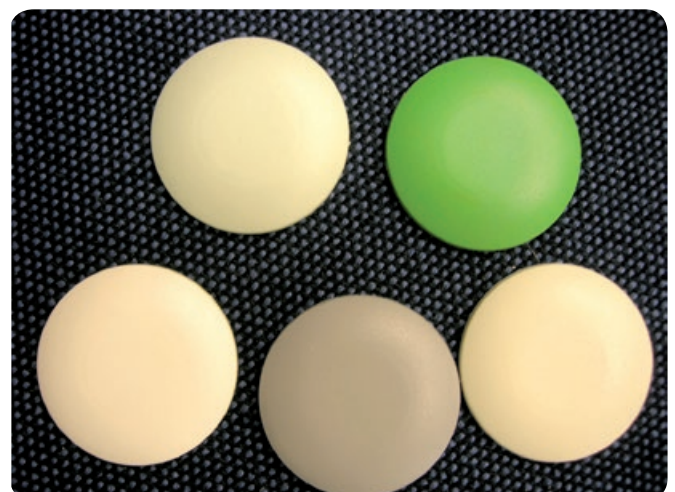


LAX has a thermal conductivity of 20 times less than a stainless steel screw A2 and about 40 times smaller than a carbon steel screw.

The use of stainless steel screws or galvanized screws (carbon steel) causes continuous financial losses to the user of cold store (heat transmission).



Installation near the edge of the sandwich panel



We produce LAX caps in RAL colours

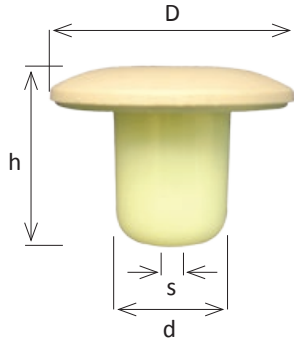
PRINCIPLE OF SELECTION OF LENGTH OF SCREWS FOR THICKNESS OF PANELS

IMPACT-R 14	for the thickness of the plate, it is necessary to select a screw with a length of at least 15 mm longer than the thickness of the board
IMPACT-R 6	for the thickness of the plate, it is necessary to select a screw with a length of at least 5 mm longer than the thickness of the board



CONNECTOR FOR INSTALLATION OF SANDWICH PANELS IN COLD STORES

Material: modified polyamide with UV add-on
Standard RAL colours: 9010, 9002, 9003, 9006
Other colours on request
Construction certificate: European Technical Assessment ETA-21/0376 of 21 June 2021



Reduction of thermal bridge and elimination of condensation

Excellent connector for installation of sandwich panels in cold stores. Lax Lax reduces the thermal bridge and eliminates the phenomenon of condensation on the connector.

Material: modified polyamide. Working temperature from -40 to +85°C.

article name	dimension	hole diameter	Panel thickness	package
	D-d-h	s		box
LAX	45 x 23 x 33	6,4	70-300	100

EPDM gasket for LAX flange (included in set)



EPDM gasket 40 x 22	40 x 22 x 2			100
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Hole saw for drilling a hole in the panel for LAX

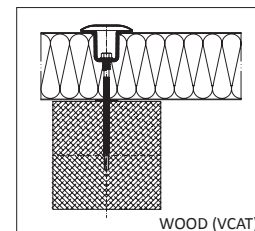
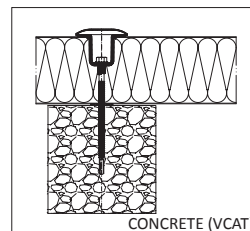
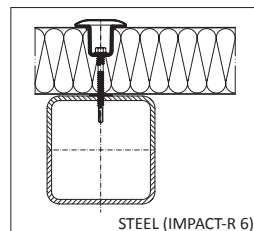
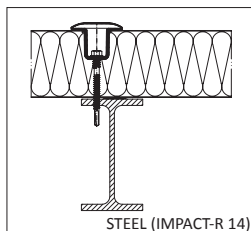


Hole saw 24	φ 24			1
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Components of sling to the ceiling suspended underneath the structure



article name	dimension	class	corrosion protection	package
				box
threaded rod φ 6mm	1m	5.8.	zinc	10 pcs.
set of nuts and washers 6xM6 + 1xEPDM C16 + 1xEPDM C19+C20		5.8	zinc	100 pcs.



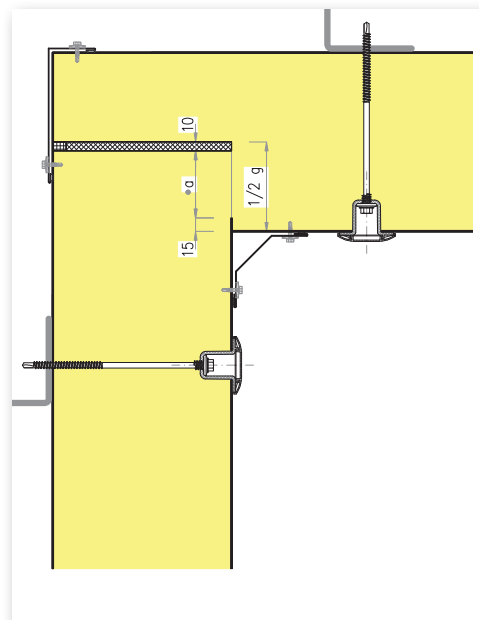
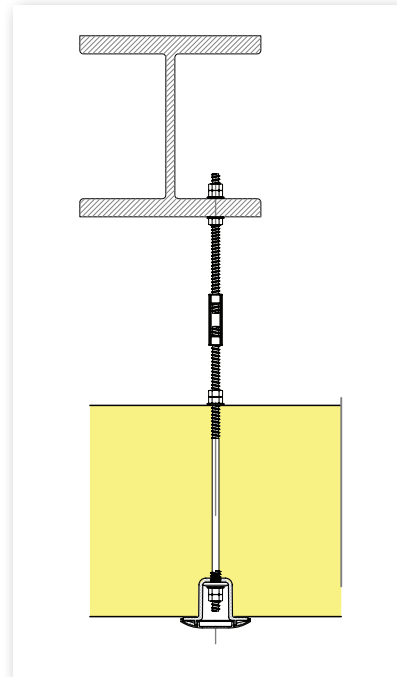
For use in kits with screws: IMPACT-R 6, IMPACT-R 14, VCAT



Freezer with a rack construction



Suspension of the ceiling panel on a threaded rod directly to the structure



Installation of the ceiling panel to the steel structure

SELECTION OF CONNECTORS DEPENDING ON THE TYPE OF WORK ENVIRONMENT

Product	Environments								
	Cold store -20°C	Cold store 0°C	Agro, piggery	CX	C5	C4	C3	C2	Fire Safe
LAX *	✔	✔	✔	✔	✔	✔	✔	✔	✘
WELRO*	✘	✘	✔	✔	✔	✔	✔	✔	✔
WELRO-XL *	✔	✔	✔	✔	✔	✔	✔	✔	✔
Carbon steel screw DACRO 1000	✘	✘	✘	✘	✔	✔	✔	✔	✔
Carbon steel screw DACRO 500	✘	✘	✘	✘	✔	✔	✔	✔	✔
Carbon steel screw zinc plated	✘	✘	✘	✘	✘	✔	✔	✔	✔
Stainless steel screw A2	✘	✘	✘	✘	✔	✔	✔	✔	✔

✔ excellent ✔ good ✘ not recommended * with carbon steel screw