SINTEF Technical Approval

TG 2607

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Amended: 01.09.2026
Valid until 01.11.2029
Provided listed on
www.sintefcertification.no

SINTEF confirms that

Eurofast Fastening System

has been found to be fit for use in Norway and to meet the provisions regarding product documentation given in the regulation relating to the marketing of products for construction works (DOK) and regulations on technical requirements for building works (TEK), with the properties, fields of application and conditions for use as stated in this document

1. Holder of the approval

Van Roij Fasteners Europe B.V.
Indumastraat 18, 5753 RJ,
Deurne,
Netherlands
https://eurofastgroup.com

2. Product description

Eurofast Fastening System is a system for fastening of roof membranes to an underlay of steel sheets or wooden substrates and consists of a tube washer and a corresponding screw. Eurofast fastening plug TLK-45xLL (alternative product key EPT-45xLL-PP), see fig. 1, is made of injection moulded modified polypropylene.

The tube washer is fastened to the underlay of steel sheets or wooden substrates using Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C), see fig. 2. The screw is made of organic coated steel.

3. Fields of application

Eurofast Fastening System is used for mechanical fastening of bituminous and polymeric roofing membranes on flat, compact roofs with a supporting construction of load bearing steel sheets and wooden substrates.

4. Product performance

Fastening capacity

Table 1 shows the capacities for Eurofast fastening plug TLK-45xLL (alternative product key EPT-45xLL-PP) when fastened in various roofing membranes. Table 2 and 3 show the pull-out capacity for Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C) when fastened in steel sheets or wooden substrates.

Corrosion protection

Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C) has corrosion protection corresponding to application category KLA as defined in Building Research Design Guide no. 544.206 *Mekanisk feste av asfalttakbelegg og takfolie på flate tak*, which corresponds to corrosion protection according to EAD 030351-00-0402, pkt. 2.2.3.4 and Annex 2, A2.4, 15 Kesternich-cycles.

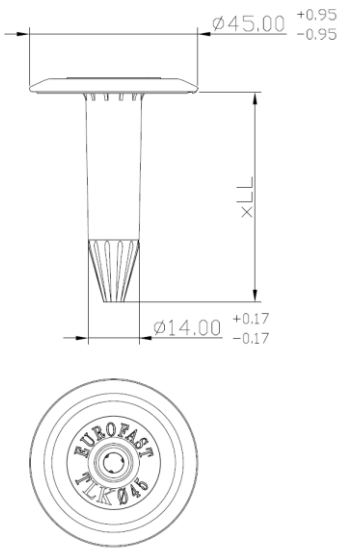

Fig. 1
Eurofast fastening plug TLK-45xLL
(alternative product key EPT-45xLL-PP)

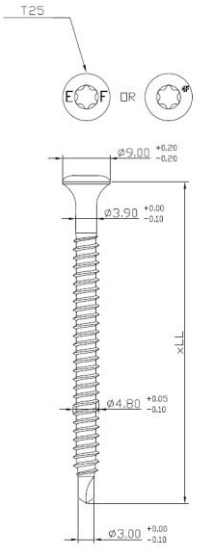

Fig. 2
Eurofast Roofing Screw EDS-B-48xLL
(alternative product key ERSS-48xLL-2-T25-15C)

Table 1
Design axial capacity in ultimate limit state for Eurofast TLK-45xLL (alternative product key EPT-45xLL-PP) when fastened in various roofing membranes[1)]

Roofing	Design capacity N/fastener
Single layer bituminous membranes	
Phønix Sveiseunderlagsmembran PTM DuraFlex (PF 3500 SBS)	700
Phønix Sveiseunderlagsmembran PTM DuraFlex Kombi (PF/GF 3500 SBS)	750
Icopal Base 511PG (DK) / 500PG	750
Icopal Base 411PG (DK)	750
Icopal Base (Malmø)	750
Icopal Mono PC	650
Binne PF 3000	450
Deboer PF/GF 3000 SBS T/F	700
Derbicolor	550
Derbigum SP FR	550
EshaFlex Top Mono N PG 5000	700
Isola Mestertekk	500
Technoelast K-MS 1 170/3000	500
Technoelast K-YS 5500	550
Double layer bituminous membranes	
Phønix double layer with Sveiseunderlagsmembran PF/GF 3500 SBS	700
Icopal double layer with Icopal Base 511 PG produced in denmark	650
Katepal two-layer system Base layer: K-MS 170/4000 Top Layer: K-PS 170/5000	750
PVC membranes	
Protan SE 1,2 roofing membrane	600
Protan SE 1,2 roofing membrane with flap	900
Icopal Monarplan FM EM	650

[1)] The given design capacities shall be used both when the test results are given according to NT Build 307, EAD 030351-00-0402 and EN 16002 when a safety factor γ_m= 1.5 is used.

[2)] Wind load capacity is determined using a partial factor of γ_m=1.5. During a transitional period until January 1, 2028, designers may choose to use wind load capacities recalculated with a partial factor of γ_m=1.3.

Table 2
Design axial capacity in ultimate limit state for Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C), 4.8 mm screw when fastened in steel sheets.

Plate thickness mm	Design capacity N/screw
0.70	750
0.75	950
0.80	1000
1.00	1050
1.25	1450

Table 3
Design axial capacity in ultimate limit state for Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C), 4.8 mm screw when fastened in wooden substrates.

Substrate	Thickness mm	Design capacity N/screw	Characteristic density kg/m³
OSB/3	18	850	550
OSB/3	21	900	
OSB/3	25	900	
Chipboard	19	900	600
Plywood	18	850	400
Plywood	21	950	
Wooden substrate C24	24	1350	350

Safety against self-unwinding
Eurofast Roofing Screw EDS-B-48xLL (alternative product key ERSS-48xLL-2-T25-15C) has been tested for safety against self-unwinding and is considered to be safe in use.

Application properties
Eurofast Fastening System has been evaluated acceptable for use under the following conditions:
- Installation at air temperatures down to -20 °C
- Oblique loading when fastened at the edge of membrane sheets or at flaps
- Impact resistance at loads from movements in the membrane
- Torch-on welding and moderate drying of asphalt roofing membrane
- Durability when applied together with PVC roofing membranes and bituminous roofing membranes

5. Environmental aspects

Substances hazardous to health and environment
The product contains no hazardous substances with priority in quantities that pose any increased risk for human health and environment. Chemicals with priority include CMR, PBT or vPvB substances.

Waste treatment/recycling
The product shall be sorted as metal or residual waste on the building/demolition site. The product shall be delivered to an authorized waste treatment plant for material recovery or energy recovery.

Environmental declaration
An environmental declaration (EPD) has been worked out according to EN 15804 for Eurofast Fastening Sytem For complete documentation see EPD no. 505/2023, www.eco-platform.org.

6. Conditions of use

Anchor load capacities
Calculation of fastening numbers shall be carried out as shown in Building Research Design Guide no. 544.206 or in “TPF Informerer nr. 5” (TPF Informs no. 5), based on the design capacity in Table 1 and 2. The lowest value in Table 1, 2 and 3 shall always be used.

Fastening in steel sheets
It is generally recommended that the steel sheet thickness is minimum 0.7 mm when the roofing membrane is fastened to steel sheets. In particularly exposed areas, the recommended minimum thickness is 0.8 mm. On-site pull-out tests should be performed in cases of re-roofing where it may be difficult to assess the quality of the substructure.

Fastening in wooden substrates
On-site testing of pull-out capacity shall be performed if density and substrate type are unknown.

7. Product and factory production control

The product is produced by Van Roij Fasteners Europe BV, Indumastraat 18, 5753 RJ, Deurne, Netherlands.

The holder of the approval is responsible for the factory production control in order to ensure that the product is produced in accordance with the preconditions applying to this approval.

The manufacturing of the product and the manufacturer's system for factory production control (FPC) is subject to continuous surveillance in accordance with the contract regarding SINTEF Technical Approval.

8. Basis for the approval

The evaluation of the product is based on reports owned by the holder of the approval.

The evaluation of design and technical solutions are based on recommendations given in SINTEF Building Research Design Guides.

9. Marking

The product is CE-marked in accordance with ETA 23/0651.

The approval mark for SINTEF Technical Approval TG 2607 may also be used.

10. Liability

The holder/manufacturer has sole product responsibility according to existing law. Claims resulting from the use of the product cannot be brought against SINTEF beyond the provisions of Norwegian Standard NS 8402.

for SINTEF

Susanne Skjervø
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