

1. Unique identification code of the product-type:

TLK-45xLL (or EPT-45xLL-PP)

2. Intended use/es:

FASTENERS FOR FLEXIBLE ROOF WATERPROOFING SYSTEMS

3. Manufacturer:

Van Roij Fasteners Europe B.V. | Indumastraat 18 | 5753 RJ Deurne | Netherlands

4. Authorised representative:

Not applicable

5. System/s of AVCP:

System 2 +

6. European Assessment Document:

EAD 030351-00-0402 (from: 02.2019)

European Technical Assessment:

ETA-23/0651 (issued on: 26.09.2023)

Technical Assessment Body:

ITB (1488)

Notified body/ies:

ITB (AC020) Certificate: 1488-CPR-0662/Z

7. Declared performance/s:

Essential characteristics	Performances	Harmonized Technical Specification
Fastener axial load	See on the next page/pages: Annex A.2, B.2, C.2, D.2, E.2, J.2, K.2, L.2, N.2, O.2, S.1	ETA-23/0651
Resistance to fastener unwinding	The rotation of the fastener head after 900 cycles $\leq 1/2$ turn.	ETA-23/0651
Mechanical resistance/brittleness of plastic fasteners	Plastic fasteners are resistant to impact and brittleness, after impact of weight from drop height $\geq 1,0$ m.	ETA-23/0651
-	-	-
Mechanical resistance after heat ageing of plastic fasteners	Plastic fasteners, after heat ageing, are resistant to impact and brittleness, after impact of weight from drop height $\geq 1,0$ m.	ETA-23/0651

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

A copy of the Declaration of Performance is available at www.eurofastgroup.com

Signed for and on behalf of the manufacturer by:

Kjell Verdonschot
Chief Executive Officer C.E.O

At Deurne on 27.09.2023



Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	EDF-BAR F (ETM-2250-30-4.8-8.5-1.0)
	TRP-45xLL (EPT-45xLL-PA)	HTLK-45xLL (EPT-O-45xLL-PP)	EDF-BAR FB (ETM-B-2250-30-4.8-8.5-1.0)
	BTRP-45xLL (EPT-B-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	DVP-EF-5010DFR (EPM-50D-4.85-1.0)
	TWP-8040xLL (EPT-8040xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	DVP-EF-7070D (EPM-7070D-4.85-1.0)
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	DVP-EF-7010DFR (EPM-70D-4.85-1.0)
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	DVP-EF-8240D (EPM-8240D-4.85-1.0)
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EF-8240XH (EPM-8240XH-4.85-1.0)
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EFB-8240D (EPM-B-8240D-4.85-1.0)
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EFZK-8240D (EPM-ZK-8240D-4.85-1.0)
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	DVP-EFF-8040D (EPM-8040D-4.85-1.0)
EDS-S-48xLL (ERSS-48xLL-0-PH2-15C or ERSS-48xLL-0-PH2-M)	2,67	1,77	5,18
ERSS-48xLL-0-T25-15C (ERSS-48xLL-0-T25-M)	2,67	1,77	5,18

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)				
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)
EDS-S-48xLL (ERSS-48xLL-0-PH2-15C or ERSS-48xLL-0-PH2-M)	5,05	4,43	3,89	2,96
ERSS-48xLL-0-T25-15C (ERSS-48xLL-0-T25-M)	5,05	4,43	3,89	2,96

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners	Annex A.2
EDS-S-48xLL (ERSS-48xLL-0-PH2-15C or ERSS-48xLL-0-PH2-M) (ERSS-48xLL-0-T25-15C or ERSS-48xLL-0-T25-M)	

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EDS-B-48xLL (ERSS-48xLL-2-T25-15C or ERSS-48xLL-2-T25-M)	2,64	1,68	1,78
ERSS-48xLL-2-PH2-15C (ERSS-48xLL-2-PH2-M)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F (ETM-2250-30-4.8-8.5-1.0)	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)
	EDF-BAR FB (ETM-B-2250-30-4.8-8.5-1.0)	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)
	DVP-EF-5010DFR (EPM-50D-4.85-1.0)	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)
	DVP-EF-7070D (EPM-7070D-4.85-1.0)	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)
	DVP-EF-7010DFR (EPM-70D-4.85-1.0)	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)
	DVP-EF-8240D (EPM-8240D-4.85-1.0)	-	-	-	
	DVP-EF-8240XH (EPM-8240XH-4.85-1.0)	-	-	-	
	DVP-EFB-8240D (EPM-B-8240D-4.85-1.0)	-	-	-	
	DVP-EFZK-8240D (EPM-ZK-8240D-4.85-1.0)	-	-	-	
	DVP-EFF-8040D (EPM-8040D-4.85-1.0)	-	-	-	
EDS-B-48xLL (ERSS-48xLL-2-T25-15C or ERSS-48xLL-2-T25-M)	5,18	5,05	4,43	3,89	2,96
ERSS-48xLL-2-PH2-15C (ERSS-48xLL-2-PH2-M)	5,18	5,05	4,43	3,89	2,96

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex B.2

EDS-B-48xLL (ERSS-48xLL-2-PH2-15C or ERSS-48xLL-2-PH2-M)
(ERSS-48xLL-2-T25-15C or ERSS-48xLL-2-T25-M)

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EDS-B-58xLL (ERSS-58xLL-2-T25-30C)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7007D (EPM-70D-6.0-0.7)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7007H (EPM-70H-6.0-0.7)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	DVP-EF-7007N (EPM-70N-6.0-0.7)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
EDS-B-58xLL (ERSS-58xLL-2-T25-30C)	5,05	4,43	3,89	2,96	2,91

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

EDS-B-58xLL (ERSS-58xLL-2-T25-30C)

Annex C.2

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)

	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EDS-SRB-48xLL (ERSS-48xLL-2-T25-B)	2,64	1,68	1,78
ERSS-48xLL-2-PH2-B	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)

	EDF-BAR F (ETM-2250-30-4.8-8.5-1.0)	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)
	EDF-BAR FB (ETM-B-2250-30-4.8-8.5-1.0)	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)
	DVP-EF-5010DFR (EPM-50D-4.85-1.0)	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)
	DVP-EF-7070D (EPM-7070D-4.85-1.0)	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)
	DVP-EF-7010DFR (EPM-70D-4.85-1.0)	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)
	DVP-EF-8240D (EPM-8240D-4.85-1.0)	-	-	-	-
	DVP-EF-8240XH (EPM-8240XH-4.85-1.0)	-	-	-	-
	DVP-EFB-8240D (EPM-B-8240D-4.85-1.0)	-	-	-	-
	DVP-EFZK-8240D (EPM-ZK-8240D-4.85-1.0)	-	-	-	-
	DVP-EFF-8040D (EPM-8040D-4.85-1.0)	-	-	-	-
EDS-SRB-48xLL (ERSS-48xLL-2-T25-B)	5,18	5,05	4,43	3,89	2,96
ERSS-48xLL-2-PH2-B	5,18	5,05	4,43	3,89	2,96

Eurofast Flat Roof Fasteners

Annex D.2

EDS-SRB-48xLL (ERSS-48xLL-2-T25-B)
(ERSS-48xLL-2-PH2-B)

Characteristic Values of Axial Pull-Through * Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)

	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EFXHD-67xLL (ERSS-67xLL-2-T25-M)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Screw:			
EFXHD-67xLL	(ERSS-67xLL-2-T25-M)		
Metal pressure plate:			
DVP-EF-5010D	(EPM-50D-6.3-1.0)	DVP-KMT-8240 + KMT-15xLL	(EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)
DVP-EF-5010N	(EPM-50N-6.3-1.0)	EPM-T-IP-80-13.6-0.8 + KMT-15xLL	(EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)
DVP-DF-7070D	(EPM-7070D-7.0-1.0)	EPM-T-IT-80-13.6-0.8 + KMT-15xLL	(EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)
DVP-EF-7010D	(EPM-70D-6.5-1.0)	EPM-T-IE-80-13.6-0.8 + KMT-15xLL	(EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)
DVP-EF-7010N	(EPM-70N-6.5-1.0)	DVP-DL-70N + TRP-45xLL	(EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)
DVP-EF-8040D	(EPM-8040D-6.5-1.0)	DVP-DL-70N + TLK-45xLL	(EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)
DVP-EF-8040N	(EPM-8040N-6.5-1.0)		
DVP-DF-8240D	(EPM-8240D-7.0-1.0)		
DVP-DF-8240H	(EPM-8240H-7.0-1.0)		
DVP-DF-8240XH	(EPM-8240XH-7.0-1.0)		
DVP-EF-51N	(EPM-51N-6.7-0.84)		
EPM-51N-5.6-0.84			
DVP-DFB-8240D	(EPM-B-8240D-7.0-1.0)		
EPM-IP-80-6.8-0.8			
EPM-IT-80-6.8-0.8			
EPM-IE-80-6.8-0.8			
Pressure plate with tube:		Termination bar:	
BIO-45xLL	(EPT-45xLL-BIO)	EDF-BAR F-TUBE	(ETM-T-2250-30-6.5-8.3-15.0-1.0)
TRP-45xLL	(EPT-45xLL-PA)	EDF-BAR F-TUBE + KMT-15xLL	(ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)
BTRP-45xLL	(EPT-B-45xLL-PA)		
TWP-8040xLL	(EPT-8040xLL-PA)		
TLK-45xLL	(EPT-45xLL-PP)		
HTLK-45xLL	(EPT-O-45xLL-PP)		
TLK-75xLL	(EPT-75xLL-PP)		
Substrate:			
Steel S280		EN 10346	
Steel S320		EN 10346	
OSB/3	$\rho_{min} = 550 \text{ kg/m}^3$	EN 12369-1	
Chipboard	$\rho_{min} = 600 \text{ kg/m}^3$	EN 12369-1	
Plywood	$\rho_{min} = 400 \text{ kg/m}^3$	EN 12369-2	
Timber, class \geq C24	$\rho_{min} = 350 \text{ kg/m}^3$	EN 338	
Installation data:			
Max. drilling capacity in steel substrate:		2x1,25 mm	
Head type:		Raised Bugle Head	
Recess:		TX25	
Fixing in steel substrate:		Min. 20 mm of the screw fixed through the steel sheet	
Fixing in wooden and wood-based substrate:		Full thread through the substrate or minimum embedment depth	
Installation force of installation tool in:			
- steel substrate		25 kg	
- wooden and wood-based substrate		35 kg	
Installation tool speed:		1600 - 1800 rpm	

Eurofast Flat Roof Fasteners

Annex E.2

EFXHD-67xLL (ERSS-67xLL-2-T25-M)

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	EDF-BAR F (ETM-2250-30-4.8-8.5-1.0)
	TRP-45xLL (EPT-45xLL-PA)	HTLK-45xLL (EPT-O-45xLL-PP)	EDF-BAR FB (ETM-B-2250-30-4.8-8.5-1.0)
	BTRP-45xLL (EPT-B-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	DVP-EF-5010DFR (EPM-50D-4.85-1.0)
	TWP-8040xLL (EPT-8040xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	DVP-EF-7070D (EPM-7070D-4.85-1.0)
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	DVP-EF-7010DFR (EPM-70D-4.85-1.0)
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	DVP-EF-8240D (EPM-8240D-4.85-1.0)
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EF-8240XH (EPM-8240XH-4.85-1.0)
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EFB-8240D (EPM-B-8240D-4.85-1.0)
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	DVP-EFZK-8240D (EPM-ZK-8240D-4.85-1.0)
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	DVP-EFF-8040D (EPM-8040D-4.85-1.0)
EDS-H-50xLL (ERWS-50xLL-0- PH2-15C)	2,67	1,77	5,18
ERWS-50xLL-0- T25-15C	2,67	1,77	5,18

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7005D (EPM-70D-5.0-0.5)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7005N (EPM-70N-5.1-0.5)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	-
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
EDS-H-50xLL (ERWS-50xLL-0- PH2-15C)	5,05	4,43	3,89	2,96	2,36
ERWS-50xLL-0- T25-15C	5,05	4,43	3,89	2,96	2,36

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex J.2

EDS-H-50xLL (ERWS-50xLL-0-PH2-15C)
ERWS-50xLL-0-T25-15C

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
GBS-60xLL (ERAS-60xLL-0-T25-15C)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7007D (EPM-70D-6.0-0.7)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7007H (EPM-70H-6.0-0.7)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	DVP-EF-7007N (EPM-70N-6.0-0.7)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
GBS-60xLL (ERAS-60xLL-0-T25-15C)	5,05	4,43	3,89	2,96	2,91

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex K.2

GBS-60xLL (ERAS-60xLL-0-T25-15C)

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
GBSA2-60xLL (ERAS-60xLL-0-T25-S)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7007D (EPM-70D-6.0-0.7)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7007H (EPM-70H-6.0-0.7)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	DVP-EF-7007N (EPM-70N-6.0-0.7)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
GBSA2-60xLL (ERAS-60xLL-0-T25-S)	5,05	4,43	3,89	2,96	2,91

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex L.2

GBSA2-60xLL (ERAS-60xLL-0-T25-S)

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EFHD-63xLL (ERCS-63xLL-0-T25-15C or ERCS-63xLL-0-T25-M)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

Characteristic Values of Axial Pull-Through** Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7007D (EPM-70D-6.0-0.7)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7007H (EPM-70H-6.0-0.7)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	DVP-EF-7007N (EPM-70N-6.0-0.7)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
EFHD-63xLL (ERCS-63xLL-0-T25-15C or ERCS-63xLL-0-T25-M)	5,05	4,43	3,89	2,96	2,91

** "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex N.2

EFHD-63xLL (ERCS-63xLL-0-T25-15C or ERCS-63xLL-0-T25-M)

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)			
	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EFR-65xLL (ERCS-65xLL-0-T25-15C)	2,64	1,68	1,78

* "Pull-over" according to CEN/TS 17659:2021

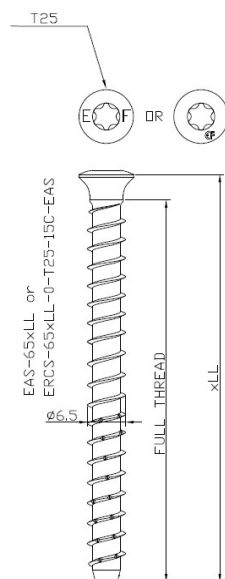
Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)					
	EDF-BAR F-TUBE (ETM-T-2250-30-6.5-8.3-15.0-1.0)	DVP-EF-4010N (EPM-40N-6.0-1.0)	DVP-EF-5010D (EPM-50D-6.3-1.0)	DVP-DF-7070D (EPM-7070D-7.0-1.0)	DVP-EF-7007D (EPM-70D-6.0-0.7)
	DVP-EF-7010D (EPM-70D-6.5-1.0)	-	DVP-EF-5010N (EPM-50N-6.3-1.0)	DVP-DF-8240D (EPM-8240D-7.0-1.0)	DVP-EF-7007H (EPM-70H-6.0-0.7)
	DVP-EF-7010N (EPM-70N-6.5-1.0)	-	-	DVP-DF-8240H (EPM-8240H-7.0-1.0)	DVP-EF-7007N (EPM-70N-6.0-0.7)
	DVP-EF-8040D (EPM-8040D-6.5-1.0)	-	-	DVP-DF-8240XH (EPM-8240XH-7.0-1.0)	-
	DVP-EF-8040N (EPM-8040N-6.5-1.0)	-	-	DVP-DFB-8240D (EPM-B-8240D-7.0-1.0)	-
EFR-65xLL (ERCS-65xLL-0-T25-15C)	5,05	4,43	3,89	2,96	2,91

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex O.2

EFR-65xLL (ERCS-65xLL-0-T25-15C)



Characteristic Values of Axial Pull-Out Resistance [kN] (according to Fig. 3 of EAD 030351-00-0402)

	Concrete C12/15 (drill 5,0 mm)	Concrete C20/25 (drill 5,2 mm)*	Concrete C20/25 (drill 5,5 mm)**	Concrete C25/30 (drill 5,5 mm)**
EAS-65xLL (ERCS-65xLL-0-T25-15C-EAS)	2,59	3,34	2,85	3,12

* value also valid for holes drilled with 5,0 mm drills

** value also valid for holes drilled with 5,2 mm or 5,0 mm drills

Characteristic Values of Axial Pull-Through* Resistance [kN] (according to Fig. 4 and 5 of EAD 030351-00-0402)

	BIO-45xLL (EPT-45xLL-BIO)	TLK-45xLL (EPT-45xLL-PP)	HTLK-45xLL (EPT-O-45xLL-PP)
	TRP-45xLL (EPT-45xLL-PA)	TLK-75xLL (EPT-75xLL-PP)	-
	BTRP-45xLL (EPT-B-45xLL-PA)	DVP-DL-70N + TLK-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PP)	-
	TWP-8040xLL (EPT-8040xLL-PA)	-	-
	EDF-BAR F-TUBE + KMT-15xLL (ETM-T-2250-30-6.5-8.3-15.0-1.0 + EPT-15xLL-PA)	-	-
	DVP-KMT-8240 + KMT-15xLL (EPM-T-8240N-13.6-1.0 + EPT-15xLL-PA)	-	-
	EPM-T-IP-80-13.6-0.8 + KMT-15xLL (EPM-T-IP-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IT-80-13.6-0.8 + KMT-15xLL (EPM-T-IT-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	EPM-T-IE-80-13.6-0.8 + KMT-15xLL (EPM-T-IE-80-13.6-0.8 + EPT-15xLL-PA)	-	-
	DVP-DL-70N + TRP-45xLL (EPM-EDL-70N-20-0.5 + EPT-45xLL-PA)	-	-
EAS-65xLL (ERCS-65xLL-0-T25-15C-EAS)	2,50	1,74	1,77

* "Pull-over" according to CEN/TS 17659:2021

Eurofast Flat Roof Fasteners

Annex S.1

EAS-65xLL (ERCS-65xLL-0-T25-15C-EAS)