

Mex®FLAT-C1 TECHNICAL DATA SHEET

Mex-Flat C1, made from martensitic stainless steel C1, is a screw specifically developed for fastening decking boards to wooden substructures.

The screw features an extra flat head, milling and driving threads, a Torx profile, and many other advantages.

Description and Benefits of the Mex-Flat C1

TORX PROFILE: Transmits greater torque

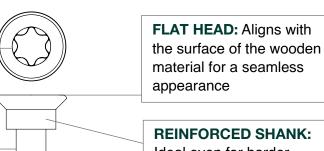
SCREW SHAFT: Reduces friction and installation torque, increases resistance to breakage, and ensures efficient power transmission

MARTENSITIC STAINLESS

STEEL C1: High-strength steel with good mechanical resistance. It is corrosionresistant in less aggressive environments and withstands typical weather conditions excellently

+ PASSIVATION
PROTECTION: Enhances
corrosion resistance

SUITABLE USE: Ideal for mounting terraces, outdoor furniture, and wooden structures in mild outdoor conditions. Best used with wood types with low tannin content, providing long service life and reliable performance



Ideal even for harder woods, reducing the risk of screw head breakage

MILLING THREAD:

Reduces friction and resistance during screwing, minimizes the risk of wood splitting, effectively removes chips, and ensures a firm hold of the screw in the material

DRIVING THREAD: Allows quick screwing of decking boards to the wooden substructure

TIP: Equipped with a notch for easier screwing

Mex® FLAT-C1

Material Description – Stainless Steel C1

- Suitable for softwood species and woods with low tannin content, such as pine, spruce, larch, etc.
- Surface treatment by passivation increases corrosion protection
- High durability: C1 is martensitic stainless steel, hardened, and has 50% higher breakaway torque than austenitic stainless steel A2 and A4
- ✓ **Limited corrosion resistance:** Stainless steel C1 is not suitable for use in aggressive environments, such as areas with high salt or chlorine content
- Magnetic properties





HIGH STRENGTH OF THE SCREW









Mex-Flat C1 is intended for:



Softwood species

- ✓ Spruce
- ✓ Siberian Larch*
- ✓ Silesian Larch*
- ✓ Pine (with and without pressure treatment)

Note: This recommendation may not apply to all usage scenarios. The properties and lifespan of the screw can be influenced by specific environmental conditions. Therefore, we recommend consulting with your dealer.

* It is possible to use, but we recommend consulting with your dealer.

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Decking Screw Offer

Art. No.	Screw Name	Size	Torx	Packaging
440C1FLAT	Mex-Flat-C1	4,0x40 mm	TX15	200 pcs
450C1FLAT	Mex-Flat-C1	4,0x50 mm	TX15	200 pcs
4570C1FLAT	Mex-Flat-C1	4,5x70 mm	TX20	200 pcs
550C1FLAT	Mex-Flat-C1	5,0x50 mm	TX25	200 pcs
560C1FLAT	Mex-Flat-C1	5,0x60 mm	TX25	200 pcs

Assessment of screw properties

Product	Characteristic yield moment $M_{_{y,k}}$ [Nmm]	Characteristic withdrawal parameter $f_{\text{ax},k}$ [N/mm²]		Characteristic head pull-through	Characteristic tensile capacity	Characteristic		
		perpendicular to the grain	parallel to the grain	parameter f _{head,k} [N/mm²]	f _{tens,k} [kN]x	torsional ratio		
Mex-Flat-C1 ø 4,0 mm	5,543	16,81	13,90	31,38	6,40	3,05		
Mex-Flat-C1 ø 5,0 mm	8,654	16,57	13,17	24,25	9,41	3,05		
Characteristic density of wood [kg/m³]	_	350		350	-	450		
Durability (i.e. corrosion protection)	Stainless steel SS 410 (Service class 3 acc. to EN 1995-1-1)							

During installation, it is recommended to pre-drill holes for the screws to ensure accuracy and reduce the risk of material damage.



With Pre-drilling



Without Pre-drilling