

EN

HASSLACHER
NORICA TIMBER

From **wood** to **wonders**.

Innovation

X-fix | The timber-to-timber connection system

The new generation of connection systems.

X-fix C

Timber-to-timber connection

For cross laminated timber ceiling elements

The **X-fix C** connects cross laminated timber floor elements quickly, easily and safely. The patented dovetail-shaped coupling strip is wedge-shaped in order to enable a fast assembly by engaging the elements. Thereby, form and traction closure is achieved at the same time.

Advantages

- + Easily installable timber-to-timber connection
- + Quick fixation with simultaneous tightening and without the need for additional tools
- + Self-tensioning connector
- + High mechanical properties through use of high-quality beech or birch plywood
- + No steel in the connection
- + Step and spline joints are eliminated

Areas of application

- + Connection of cross laminated timber floor panels
- + Connection to cross laminated wall elements exposed to high shear forces

Product standard

ETA-18/0245



X-fix Cs

Minimum length
45 mm

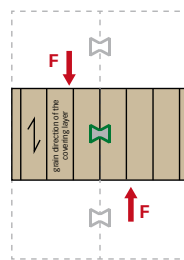
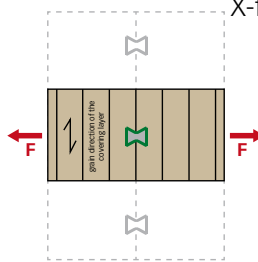
X-fix Cm

Minimum length
90 mm

Load carrying capacity and stiffness of the X-fix C per connector

- + X-fix: beech or birch plywood
- + HASSLACHER CROSS LAMINATED TIMBER with a minimum thickness of:
 - X-fix Cm** 120 mm
 - X-fix Cs** 60 mm

Loading Type/ Application		Load carrying capacity R_k [kN]	Stiffness K_{ser} [kN/mm]
Tension	X-fix Cm	28.0	20.0
	X-fix Cs	14.0	20.0
Shear	X-fix Cm	28.0	20.0
	X-fix Cs	14.0	20.0



The X-fix product family: Recommendations for design and assembly

- + Both **X-fix C** and **X-fix L** are precision-made timber-to-timber connectors and should be kept dry during storage and use.
- + For design ETA-18/0245 should be used.
- + In addition to the bearing capacity, the deformations must also be considered in the design process.
- + Damage caused by an improper application of large loads should be avoided as they reduce the load capacity of the connectors.
- + Please read and consider the provided assembly instructions.



Project information House „Krokodil“

Location: Winterthur Schweiz

Customer: Implenla Schweiz AG

Architect: ARGE Baumberger & Stegmeier AG, Zürich

Structural analysis and design: Timbatec Holzbauingenieure Schweiz AG

Products used:

4,950 m³ HASSLACHER Cross laminated Timber with excellent surface out of spruce
10,000 pieces of X-fix Cm connectors

Where once machines and locomotives made of steel were produced and industrial history was written, today urban living spaces are being created for living, working and spending free time. The peculiar naming of the buildings of Lokstadt, bridges the gap between the old industrial site of Winterthur and the modern and innovatively designed district. The mega-project „Krokodil“ - a multi-storey building with 248 apartments - is the first building in the new Lokstadt and „devours“ a total of around 4,950 m³ of cross laminated timber, mainly as prefabricated ceiling elements. The homogeneous appearance of the ceiling is a result of the HASSLACHER excellent surface. In order to save valuable time when installing these ceiling elements, the 220 mm thick cross laminated timber were connected to one another with around 10,000 X-fix C wood-wood connectors.

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X-fix
wood connector

Development partner

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