

krafton[®]
VAN *BIJL*



ASSEMBLY INSTRUCTIONS
KRAFTON[®] GRP
BRIDGE DECKING PLANK 236.40

STEP 1: PREPARATION

1. General

These assembly instructions are intended for fitting the krafton GRP bridge decking planks on various subconstructions and are applicable for bicycle bridges, pedestrian bridges and platforms.

Special attention must be paid to the expansion of the bridge deck and the application of expansion joints where necessary. The material expands as a result of heating from the sun. Please follow the instructions in these assembly instructions.

Please read these assembly instructions carefully and keep them handy when installing the product. Follow the instructions for safe and correct installation of the bridge decking planks. The manufacturer accepts no liability for damage resulting from improper installation and use.

2. Required tools and fasteners

Cutting: The material is best cut with a diamond saw. For example, a hand-held circular saw with a diamond blade.

Grinding: A grinder can also be used. This grinder must be fitted with a diamond blade for grinding dry concrete.

Drilling: If you choose to drill, a metal drill will suffice in most cases.

Our scope of delivery includes all necessary fixing materials.

3. Symbols and Safety instructions

Please ensure correct use and application of personal protective equipment.

- Wear a dust mask, grinding goggles and gloves.
- We also recommend the use of dust extractors when cutting and drilling, as well as hearing protection.



4. Substructure

- The substructure should be constructed taking into account the technical properties of the bridge decking planks used.
- The substructure must be level.
- We recommend that you provide sufficient gradient to prevent puddles of water from forming. Dirt collects in these puddles, which can freeze in winter conditions. This can cause slipperiness and risk of skidding.

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THE SPECIALIST IN GLASS FIBRE-REINFORCED PLASTIC BRIDGE DECKING

krafton® 236.40 assembly instructions
August 2021

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STEP 2: ASSEMBLY

1. Application of EPDM rubber protector

Apply the supplied EPDM rubber protector with a minimum thickness of 1.2 mm between the bridge decking planks and the substructure before installing the bridge decking planks.

- The rubber intermediate layer prevents the abrasion of sharp steel edges in the legs of the bridge decking planks.
- The rubber intermediate layer also reduces sound transmission.
- Finally, the rubber protects the substructure against moisture from above.

2. Expansion of the bridge decking planks

The use of different materials causes differences in expansion. This must be taken into consideration when fitting the bridge decking planks.

The following expansion rates apply at application temperatures of -20°C to +80°C:

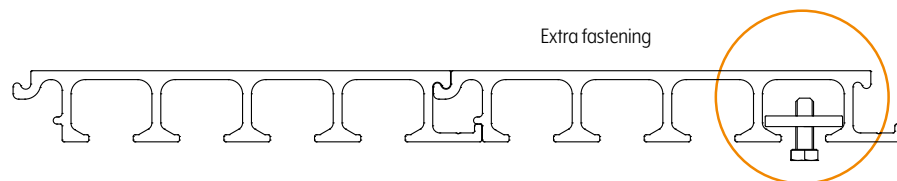
- Longitudinal direction: approx. 1.0 mm per meter.
- Transverse direction: approx. 1.6 mm per meter.
- At intermediate temperatures, proportionally smaller expansions occur.

- The required expansion space depends on:
- The expansion of the substructure;
- Temperature conditions (minimum and maximum temperature);
- Colour of the bridge decking planks; dark colours can reach a temperature of 80°C in direct sun.

When assembling in cold weather (< 15°C), the planks should be placed as far apart as possible once they have been hooked together. This means that in hot weather, when the planks expand again, that each plank has sufficient space to the adjacent planks.

3. Fitting the first and last bridge decking planks and dilatation

The bridge decking planks must be extra secured at the first and last bridge decking plank, as well as at the first and last bridge decking plank after an expansion joint. This fastening is achieved by an extra connection in the leg of the plank, as indicated in the various fitting methods. The extra mounts should be mounted at the location shown below.



STEP 3: FINISHING AND AFTERCARE

1. Finishing with angle profile

The planks can be finished easily and attractively using the angle profile supplied. The angle profile is easy to attach from above using the supplied screws.

2. Maintenance instructions

For long-term maintenance of the bridgedeck we recommend that you clean the bridgedeck annually using high-pressure cleaning.

We also recommend that you check the fastenings annually and tighten them if necessary.

4. Fitting methods

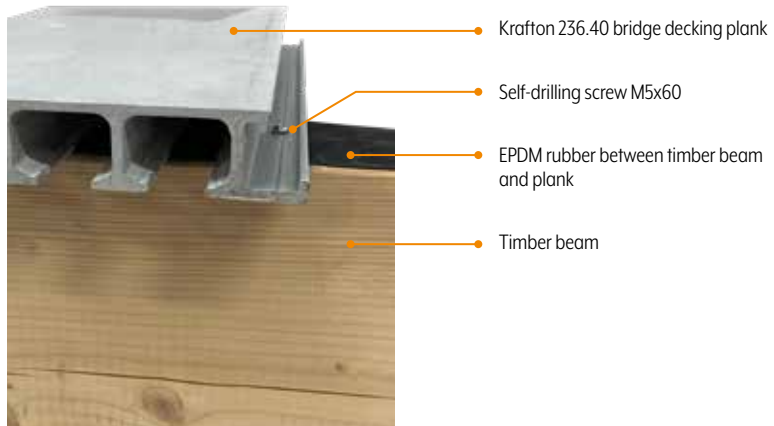
The following conditions must be observed when fitting the planks. Fastening must comply with the following specifications:

- The carrier width must be at least 60 mm for steel and 100 mm for wood.
- The thickness of the steel flange is at least 6 mm.
- To protect the bridge decking plank, always place the supplied EPDM rubber protector with a minimum thickness of 1.2 mm between the bridge decking plank and the substructure.
- The screws must be positioned in the middle of the webs of the GRP board.

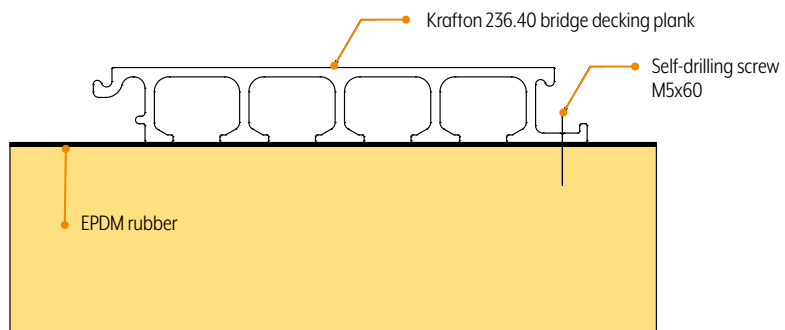
The appendices contain a description of each fitting method.

On timber, screw from above

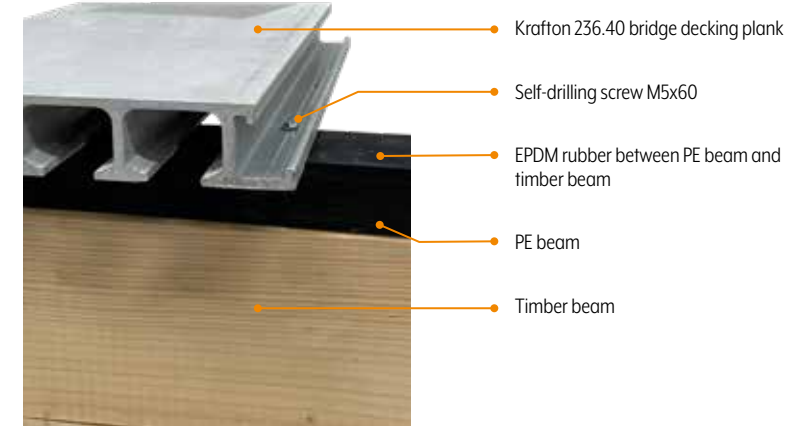
FITTING



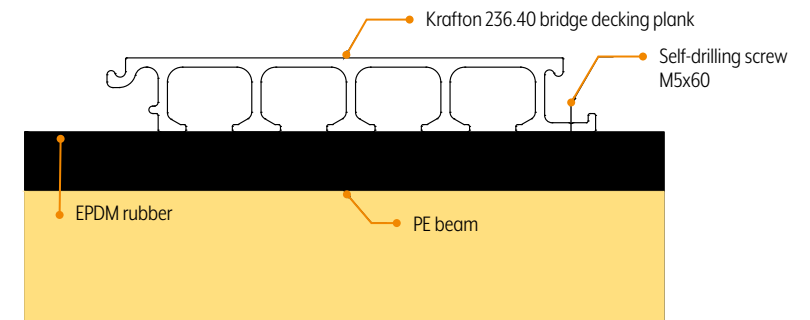
POSITION OF THE FASTENINGS

**On timber, with PE beam, screw from above**

FITTING

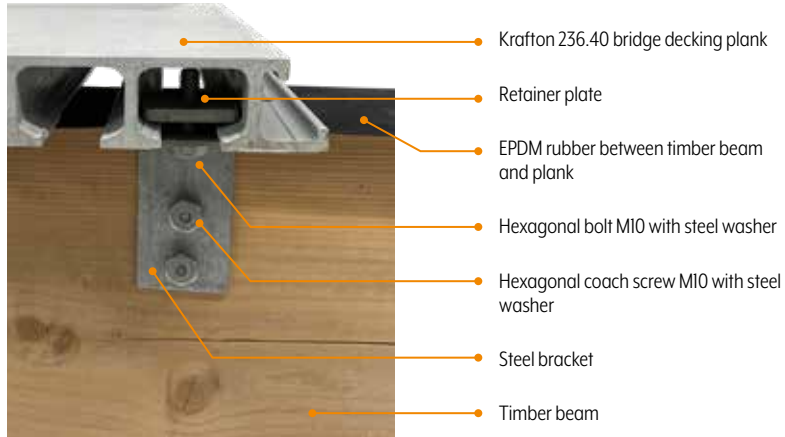


POSITION OF THE FASTENINGS

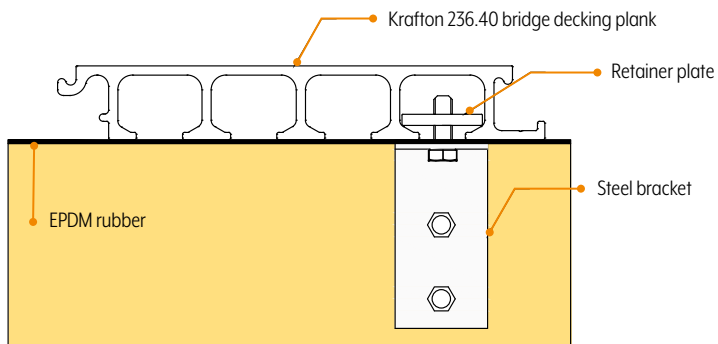


On timber, clamped

FITTING

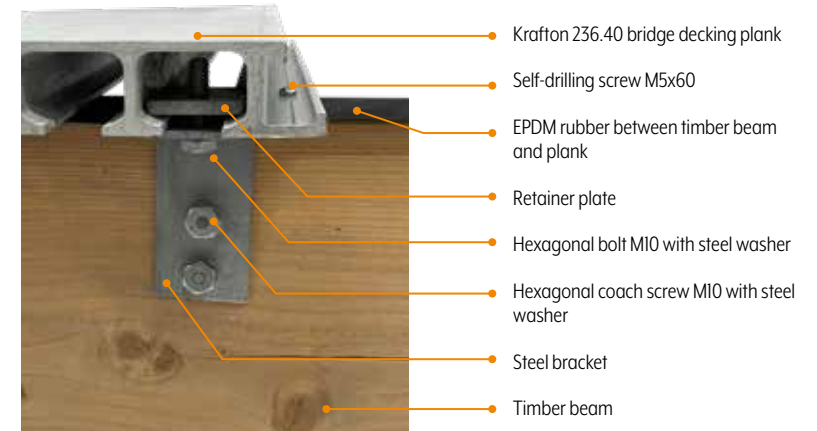


POSITION OF THE FASTENINGS

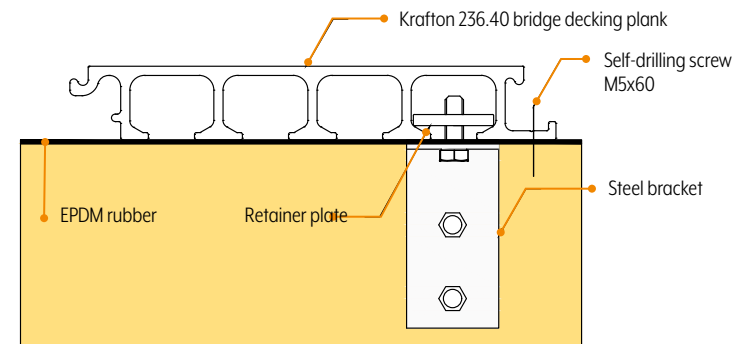


On timber, clamped and screw from above

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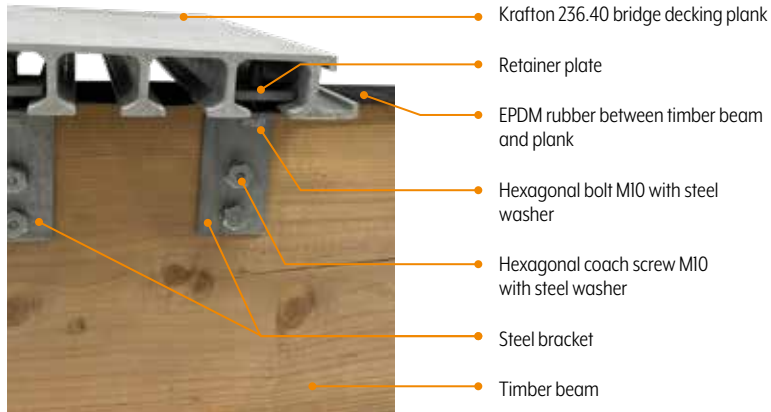


POSITION OF THE FASTENINGS

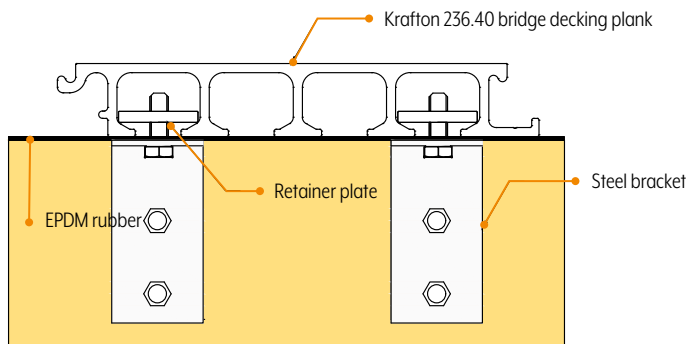


On timber, double clamped

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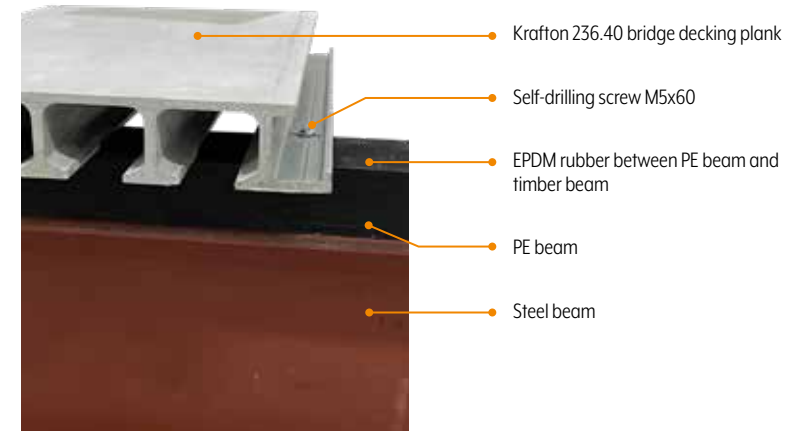


POSITION OF THE FASTENINGS

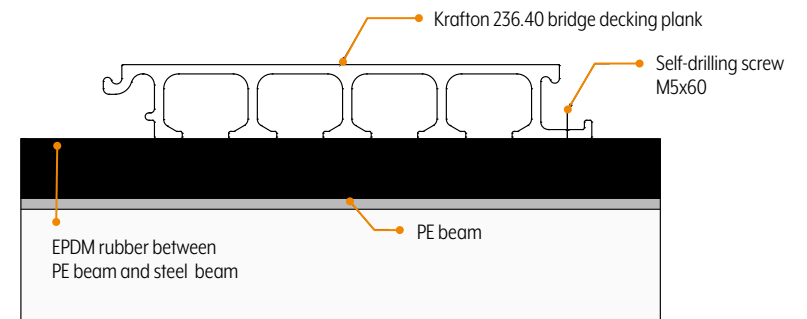


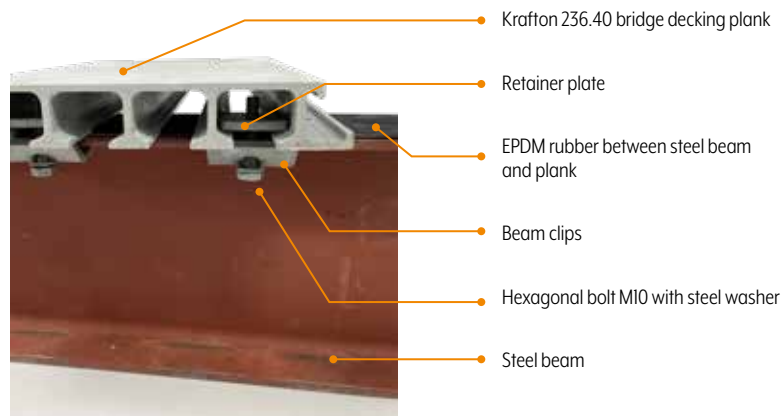
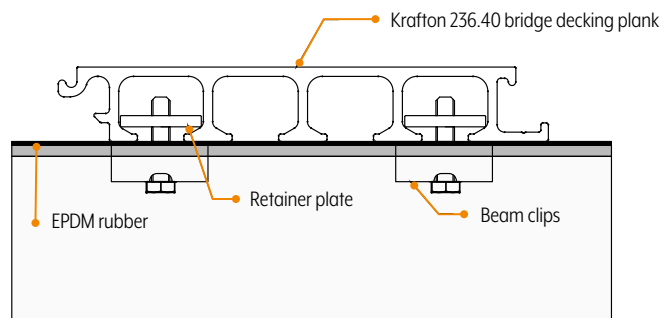
On steel, with PE beam, screw from above

FITTING



POSITION OF THE FASTENINGS



On steel, clamped**FITTING****POSITION OF THE FASTENINGS****ABOUT US**

kraffton® (Heijningen, founded in 1978) is the leading producer of fibre-reinforced polyester profiles and bridge decking planks. Every year we deliver significant quantities of standard profiles, customised profiles and bridge decking planks. Our products are used by customers throughout Europe: in infrastructure, construction, rail infrastructure, logistics, offshore, horticulture, sports and recreation.

kraffton® products are of excellent and consistent quality, which have been awarded many quality marks and certifications, including EBA, DIBt and TÜV.

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