

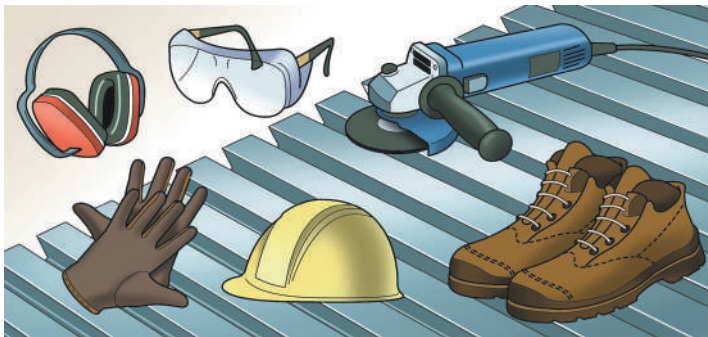
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Safety

When cutting or sizing the Duofor dovetailed sheets, use an angle grinder with a metal disc.

Always wear personal protective equipment!



Ensure that when processing Duofor dovetailed sheets on the beam layer, the sheets are properly positioned on the beam layer. For beam spacings from 1200 mm, temporarily under stamp / support the dovetailed sheet and fasten it.

Check the underlying structure for quality, strength, and rigidity! Replace or repair any defective parts as necessary.

1 How do I lay the sheets?

On beam layer: Position the sheets perpendicular to the profile direction on the beams. The sheets overlap at the beams in the length direction by approximately 100 mm.

On floor panels: Position the sheets perpendicular to the profile direction on the beams, parallel to the floor panels. The sheets overlap at any random point by approximately 50-100 mm.

2 How do I assemble the sheets?

Width direction: Only place the end flanges (bottom and top flanges) on top of each other: **color to color** / clear to clear.

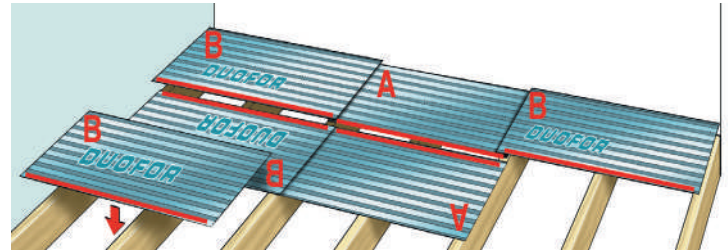
Length direction: Alternate all sheets with the sticker facing *up and down*: **color to color** / **clear to clear**.

3 What lengths are economical and available?

The most economical is the use of sheet lengths that correspond to a multiple of the center-to-center distance of the beams + 100 mm extra for overlap.

1300 mm: 2 x 600 mm + overlap; **1900 mm:** 3 x 600 mm + overlap. **1600 mm:** 3 x 500 mm + overlap; **2200 mm:** 3 x 700 mm + overlap. For the different center-to-center sizes, lengths of 1220 / 1530 / 1830 and 2000 mm, or custom sizes are available.

4 How do the sheets overlap in length and width?



Lay the even row of sheets **A**, with the sticker facing down. Click the odd row of sheets **B**, with the sticker facing up, into the even rows. Thus, in the overlap, the sheet with the sticker facing up is also the top sheet. The length overlap of the sheets is approximately 100 mm. In the width, only the outer bottom and/or top flanges are placed on top of each other. The effective width of the sheet is a maximum of 610 mm. When processing on a beam layer, allow the sheets to overlap on a beam.

5 Is the beam layer strong enough for this floor?

Based on the width, height, center-to-center distance, and the largest span, Duofor can calculate the strength and rigidity of the beam layer.

Required additional information:

- What type of ceiling is attached to the beam layer?
- Will partition walls be placed on the floor?
- What is the useful floor load (residential, office, etc.)?
- How thick will the dovetailed sheet floor be with mortar?
- What is the floor finish?

6 How do I create openings and cut the sheets to size?

Use an angle grinder with a thin metal disc for making holes, openings, or for sizing.

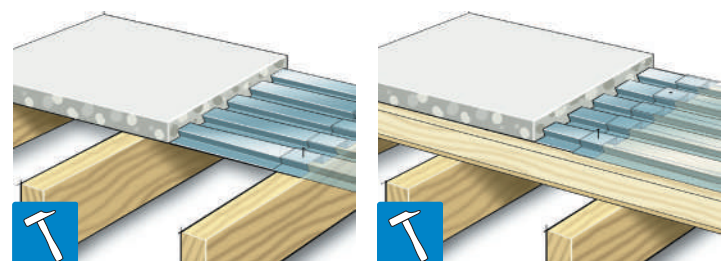
7 The beam spacing is greater than 600 mm, is that allowed?

Yes, the Duofor dovetailed sheets can easily span more than 600 mm without any problems. Duofor floors have been tested for spans up to 2.5 m.

8 Do I need to support the sheets during pouring?

When the sheets are not nailed, a span of up to 1.2 m can have about 35 mm of mortar applied to the sheet without support. When the sheets are nailed, a span of up to 1.5 m can have about 50 mm of mortar applied without support.

9 Do I need to fasten the sheets and how often?



Preferably, nail through the top flange of each beam and do not screw. Use 3 wire nails per sheet width. This makes the floor stiffer and accommodates any shrinkage and/or creep of the beams. When applying underfloor heating, nail very lightly. Use 2 wire nails per sheet width.

10 When can I fasten the sheets and when not?

The dovetailed sheets can always be fastened, except for the sound-insulating floor.

11 How much mortar should I pour on the sheet at a minimum?

Standard residential floor: 20 mm / utility floor: 33 mm.
Sound-insulating floor: 34 mm / underfloor heating: 40 mm.
For spans greater than 1.5 to 2.5 m: 54 mm or more.

12 Which types of mortar can I apply?

Duofor dovetailed sheets have been tested with various mortars.

Sand cement: CT20-F4 quality, consumption 10 L/m²/cm.

Concrete: C20/25 quality, usage 10 L/m²/cm.

Light concrete: LC25/28 quality, usage 10 L/m²/cm.

Flowable mortar: CT16-F3 quality, usage 10 L/m²/cm.

Note: Approximately 8 L/m²/cm extra for sheet filling.

13 How long does the mortar need to dry?

After 3 days, the floor can be cautiously walked on.
After 1 week, the floor has approximately 80% of its final strength.
Rule of thumb: 1 week per cm before the floor reaches final strength.

Flowable mortar is walkable after one day.

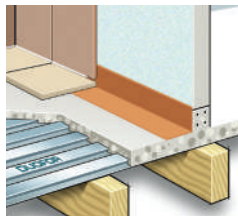
14 Standard reinforcement or grounding mesh in the floor?

No, the Duofor dovetailed sheet serves as reinforcement.

No, the dovetailed sheet can serve as grounding.

15 How do I waterproof the edges in a bathroom?

Edge connections are waterproofed by sealing the horizontal and vertical connections with paste and joint sealing tape. First, apply joint sealing tape, then spread paste in the joint, apply a fleece tape, and finally, add a second layer of sealing paste. After tiling and grouting, seal definitively.

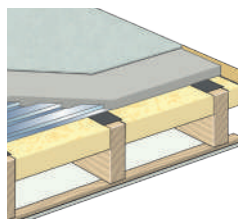


16 Can I directly glue tiles to the floor?

When using sand cement or flowable mortar, the tiles can be directly glued. Allow the mortar to dry for a minimum of 1 week. Preferably use a flexible tile adhesive for gluing. See processing guidelines from adhesive manufacturers.

17 Is a Duofor floor fire-resistant?

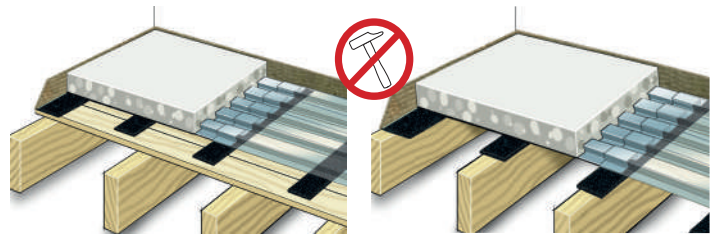
The Duofor dovetailed sheet floor is easily fire-resistant for 60 minutes. Floor planks or underlayment are not necessary for fire resistance. The beam layer determines the fire resistance. The ceiling is merely additional protection and therefore less critical.



The floor constructions must be carried out in accordance with regulations. You can always contact Duofor B.V. without obligation.

18 How do I make a floor sound-insulating?

On the beam layer or floor planks, apply Duofor DTS-G sound strips. The entire floor should remain free from construction walls, pipes, and penetrations using a mineral wool edge strip. **Do not nail the sheets!**



19 Can I also use other sound strips?

No, if a too-hard material is chosen, there is no spring action, which negatively affects contact sound insulation. If a too-soft material is used, small hairline cracks may develop in the mortar due to springing during application. These will become even more visible after full drying. A too-soft material may also sag over time due to the permanent load of the floor and useful load, leading to connection cracks with the rising work, pipes, and penetrations. This will also negatively affect sound insulation over time.

20 Meaning of Rw, Lnw and the norm not hearing anything?

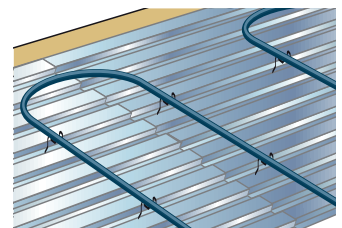
Rw: Single (laboratory) value for sound insulation, a single number that also reflects the sound insulation of a building element or structure. Building code requirement: New construction separating dwellings for airborne sound: $DnT,A,K \geq 52$ dB comparable to $R_w \geq 54$ dB. At about 54 dB, a conversation at raised voices can just be perceived, but a normal conversation can no longer be heard.

Lnw: Single (laboratory) weighted standardized value for the contact sound level of a building element or structure. The lower the Lnw value, the better the contact sound insulation. Building code requirement: Index for contact sound in separating dwelling construction is $LnT,A \leq 54$ dB. The Lnw cannot be compared with the specified requirement LnT,A . The Lnw is a material / construction property and the LnT,A is a requirement of a construction between two spaces.

Rule of thumb: LnT,A should be described as audible sound level. The lower this value, the less you hear. So when the LnT,A approaches 0 dB, you hear almost nothing.

21 How do I install underfloor heating?

Minimally fasten the Duofor sheets and keep strips free from walls. Fasten heating pipes perpendicular to the profile with Duoklips. Pipes should have a minimum of 20 mm mortar cover.



ENVIRONMENT - CORROSION CLASS AND APPLICATION AREAS

Duofor dovetailed sheets standard: Corrosion class C2.

C1: Heated buildings with a clean atmosphere.
Zinc quality: at least Z100 (100 grams of zinc/m²)



C2: Unheated buildings, areas where condensation may occur, such as crawl spaces.
Zinc quality: at least Z275 (275 grams of zinc/m²)

Applying too thin zinc layers is not permitted. It shortens the lifespan of the sheet and its reinforcement function!

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