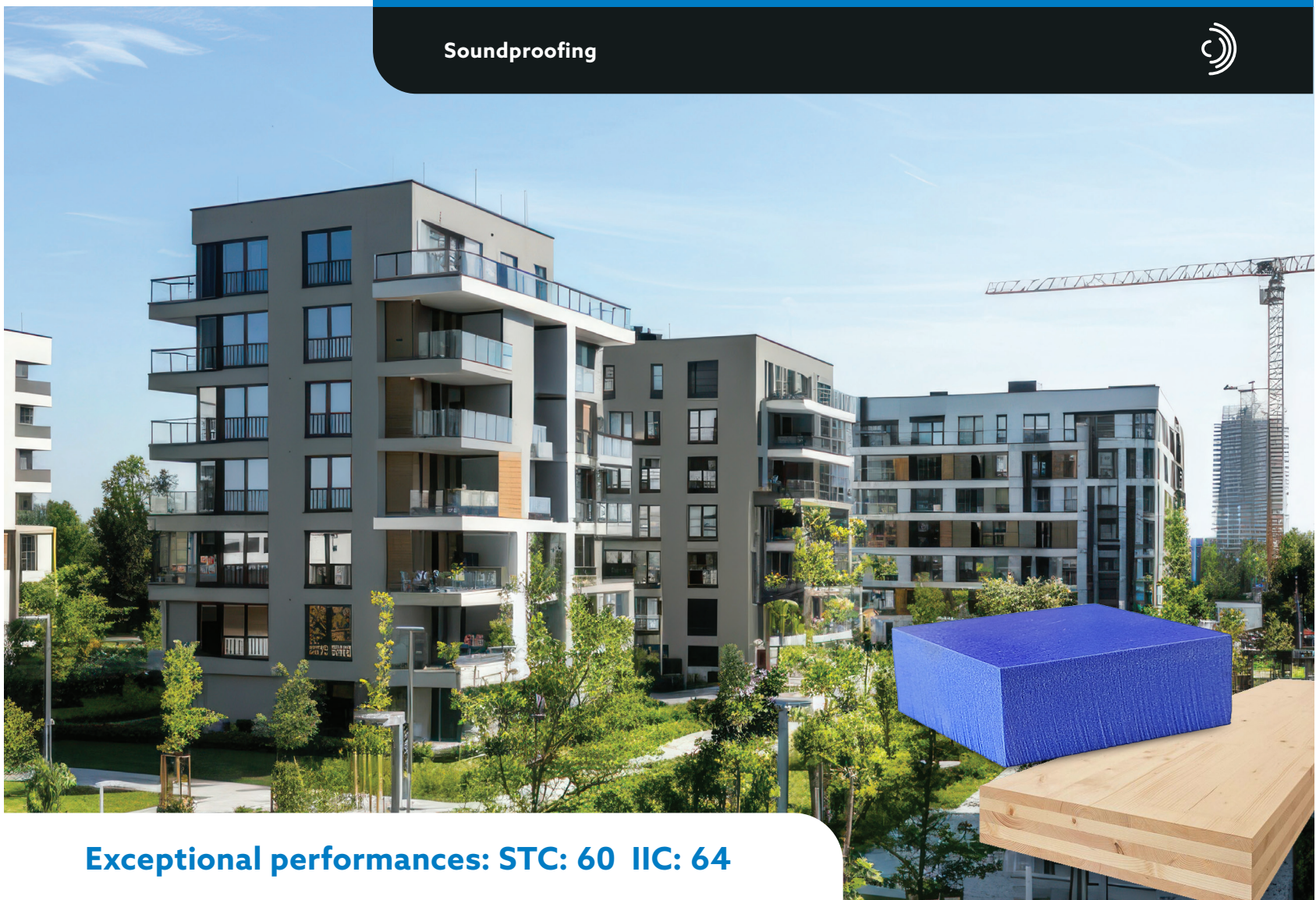


Acoustic Blocks PAC-IFB1 SD650

Acoustic solution for solid wood structures

Soundproofing



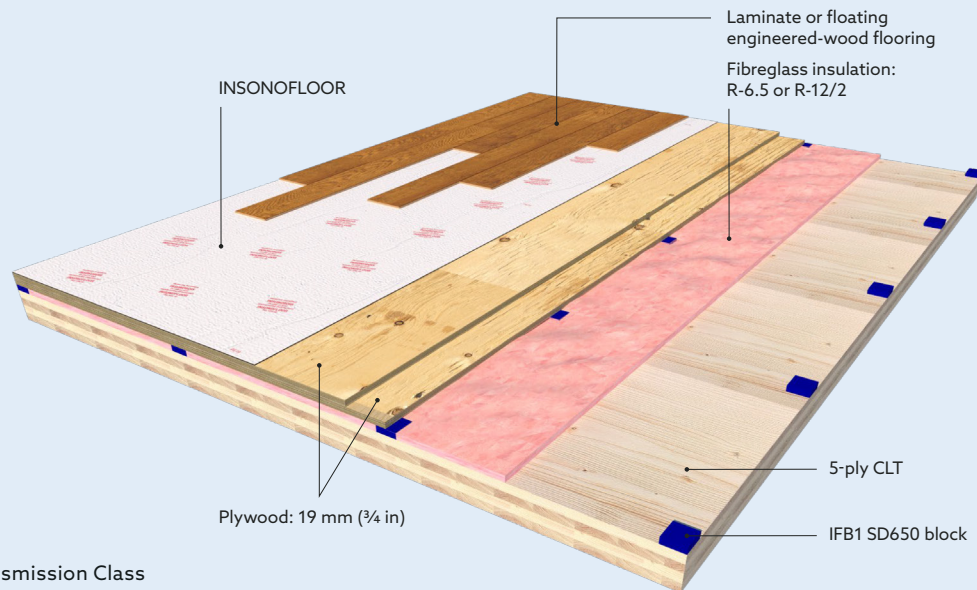
Exceptional performances: **STC: 60 IIC: 64**

Mass Timber Structure (CLT)



Benefits

- + **Easy to use:** Compact blocks (5 cm x 5 cm x 2,5 cm [2 in x 2 in x 1 in])
- + **Efficient transportation:** 25 units per box (approximate value: 10 cm x 10 cm x 18 cm [4 in x 4 in x 7 in])
- + **Space saving:** Minimal storage required
- + **Efficient installation:** No cutting required; zero loss and no waste on site
- + **Low profile:** Total height without floor finish (6.7 cm [2 5/8 in])
- + **High acoustic performance (ref. Intertek Report No.: R5915.07-113-11-R0):**
 - **Airborne noise attenuation (STC* = 60)** › Excellent soundproofing against voices and ambient sounds;
 - **Impact noise reduction (IIC** = 64)** › Effective reduction of footstep and impact noise.



*STC: Sound Transmission Class

**IIC: Impact Insulation Class

Results are based on laboratory tests according to **ASTM E90** (STC) and **ASTM E492** (IIC) standards.

Robinson Test

Assembly:

Assembly made of ceramic tiles and **INSONO AF3-130** instead of a wooden floor and the **INSONOFLOOR** product.

Results – Cycle 6:

Residential to light commercial environments (such as offices, reception areas, kitchens, and bathrooms).

Installation

01 Preparing the substrate

Clean the substrate thoroughly, removing all debris and dust. **It must be clean, dry, healthy, and stable.**

02 Installing the first row of blocks

Place the first row of **IFB** blocks at a distance of **3 mm (1/8 in) to 6 mm (1/4 in)** from the walls. This distance helps to avoid contact that could affect the acoustic performance of the system. (Fig. 1)

03 Marking the position of the blocks

Use a chalk line or laser beams to mark the exact location of each **IFB** block on the substrate to ensure a smooth and precise installation.

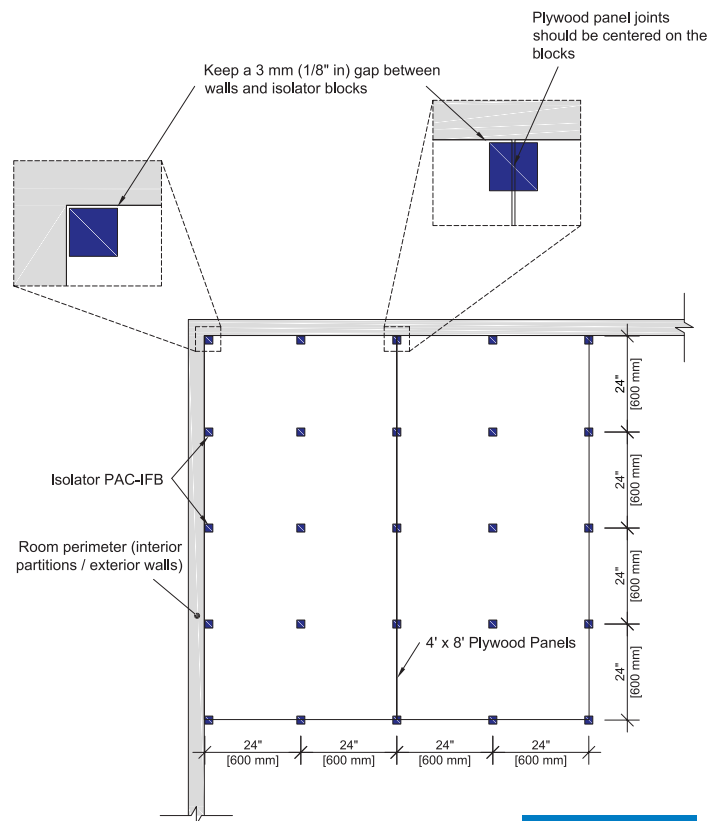


Figure 1

04 Installing the decoupling strip

Place a **decoupling strip** (cross-linked foam) on each lower part of the wall. This strip should be approximately **3 mm (1/8 in) to 6 mm (1/4 in)** thick to prevent the floating plywood assembly from coming into direct contact with the wall if an acoustic sealant is not used (see instructions in Point 9 below) (Fig. 2).

05 Installing the second row of blocks

Place the **second row** of **IFB** blocks **60 cm (24 in) c/c** from the outer edge (wall side) of the blocks in the first row (Fig. 1 and 2).

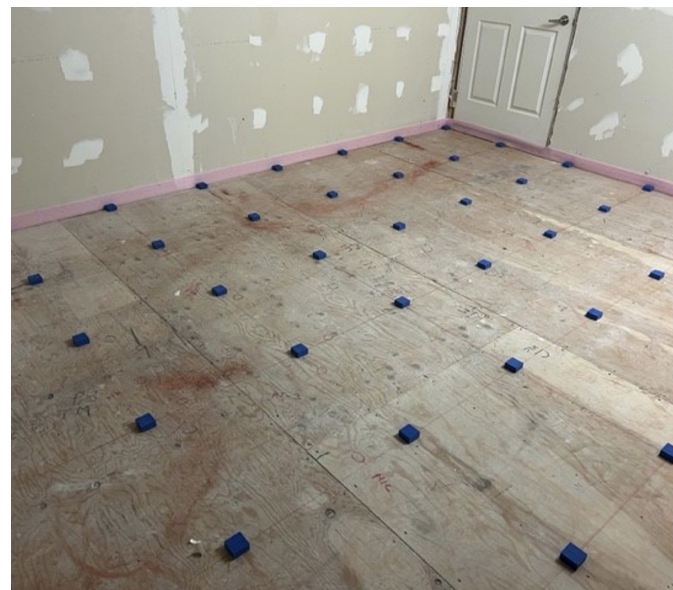


Figure 2

06 Installing the following rows of blocks

- Subsequent rows of **IFB** blocks should be spaced **60 cm (24 in)** c/c from the previous row (Fig. 1) or **every 30 cm (12 in)** for **ceramic tile sections in kitchens or bathrooms**.

07 Positioning IFB blocks

Place each **IFB** block on the marked areas. A **spray adhesive** can be used to provide a temporary hold during installation (Fig. 2).

08 Installing insulation between IFB blocks

Place **fibreglass** or **cellulose insulation** between the **IFB** blocks. Standard **R-6.7** insulation or **R-12** insulation split into two sections can be used.

Note: Make sure the blocks are correctly positioned. Adjust any block that may have moved during installation (Fig. 3).



Figure 3

09 Install the first layer of plywood

- Install the first layer of **19 mm (3/4 in) plywood** over the **IFB** blocks, making sure to **stagger the joints**. **Do not use** tongue and groove plywood. Leave a space of approximately **3 mm (1/8 in)** between the panels to prevent the floor from **squeaking**.
- **Alignment:** The plywood should be flush with the outer edge of the **IFB** blocks in the first row, maintaining a **3 mm (1/8 in) gap** between the plywood and the walls. This gap must be filled with an **acoustic sealant (TECSOUND CLG 5900)** or a **cross-linked foam strip** (see instructions in Point 4 above).

10 Installing the second layer of plywood

- Lay a second layer of **19 mm (3/4 in) plywood**, making sure to **stagger the joints** with the first layer. Fully adhere and screw this layer to ensure good cohesion and minimize vibrations.
- **Joint offset:** Start with a **60 cm x 120 cm (2 ft x 4 ft)** panel to offset the joints.
 - **Alternative option:** Install the second layer, at a **45° angle to the first layer**.

11 Attaching the second layer of plywood

- Apply **adhesive** to the first layer of plywood.
- Lay the **first panel** of the second layer, aligning its outer corners with those of the first layer.
- **Fasteners:** Attach the layers with **3.8 cm (1 1/2 in) wood screws**.

12 Fastening

- Fasten the second layer of plywood at a **maximum of 30 cm (12 in) c/c**.
- For surfaces with **ceramic tiles**, space the screws **no more than 15 cm (6 in)** apart to ensure better stability.

13 Fastening

- Install the second layer **one panel at a time**, ensuring that the staggered joints are properly aligned.

14 Complete fastening

- Fasten **each panel immediately after installation**.

15 Checking the perimeter

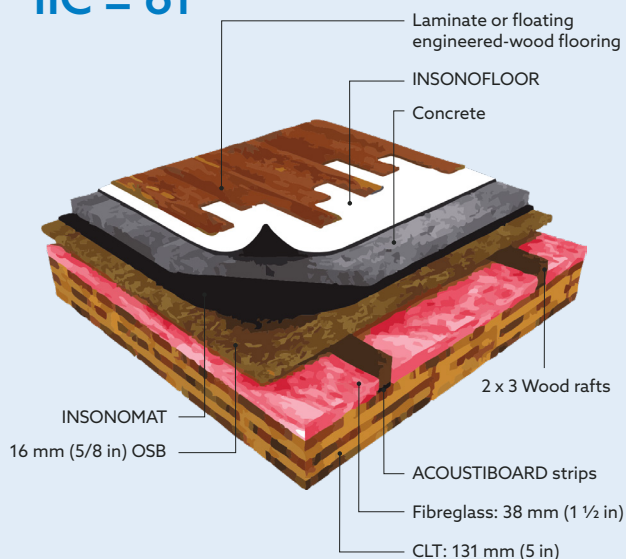
- Ensure that the **perimeter remains decoupled** from the walls to avoid any contact between the plywood layers and the structure.
- Check that the **decoupling strip or acoustic sealant** is in place.

16 Installing the membrane and flooring product

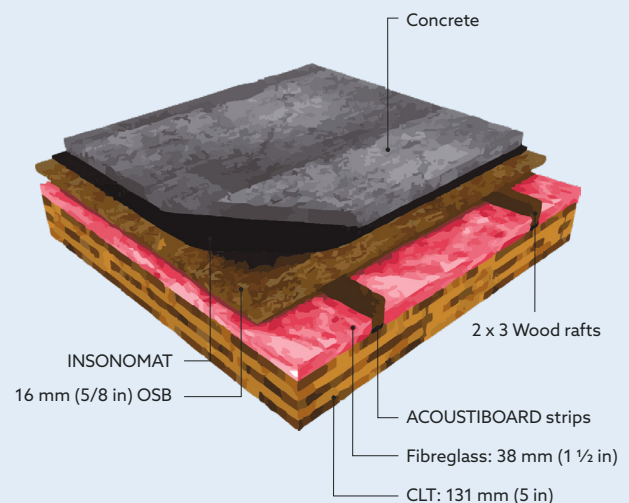
- Install the **subfloor membrane**:
 - **INSONOFLOOR** for **wood floor** covering;
 - **INSONO AF3-130** for **ceramic flooring**.
- Install flooring according to manufacturer's recommendations.

Alternative Solutions with Concrete Topping

IIC = 61



IIC = 56





Since 1908, SOPREMA improves people's well-being by protecting their environments with innovative and sustainable solutions for builders in the roofing, building envelope and civil engineering sectors.



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