



SOUNDPROOFING

INSONO AF3-47

INSONO AF3-90 / INSONO AF3-130

SOUNDPROOFING



ANTI-FRACTURE AND SOUND DAMPING WATERPROOFING MEMBRANES



INSONO AF3 membranes are composed of self-adhesive elastomeric bitumen with an exposed non-woven polyester reinforcement. The back of the membrane is protected by a release film.

Mainly used under ceramic tiles, they can also be installed with wood flooring or vinyl planks.

THE **INSONO AF3** MEMBRANES WITH 3 FEATURES

- Sound damping
- Crack isolation through a concrete slab
- Slab waterproofing*

*For installations where waterproofing is required, waterproofing strips, such as SOPRASEAL STICK 1100 or REDZONE 25, must be installed before INSONO AF3 membrane.





QUALITY



INSONO AF3-47

INSONO AF3-90 / INSONO AF3-130

ANTI-FRACTURE AND SOUND DAMPING
WATERPROOFING MEMBRANES

BENEFITS

- Reinforcement developed to optimize mortar adhesion
- Works on a variety of substrates such as plywood and concrete
- Good traffic resistance during installation
- Rot proof

PRODUCT CHARACTERISTICS

	INSONO AF3-47	INSONO AF3-90	INSONO AF3-130
THICKNESS	47 mils (1.2 mm)	90 mils (2.3 mm)	130 mils (3.3 mm)
DIMENSIONS	39 in x 55 ft (1 m x 16.76 m)	36 in x 49 ft (0.91 m x 15 m)	36 in x 26 ft (0.91 m x 8 m)
WEIGHT	37 lbs (17 kg)	71 lbs (32,4 kg)	57 lbs (26 kg)
SURFACE	Non-woven polyester		
UNDERFACE	Silicone release film		

TECHNICAL PROPERTIES

MD: Machine direction XMD: Cross machine direction

STANDARD	TEST	INSONO AF3-47		INSONO AF3-90		INSONO AF3-130	
ANSI 118.12-2010; par. 5.4	Crack-resistant test	Pass					
R value		—		0.045		0.147	
ASTM D5147 Tensile / Elongation	Maximum load	MD	XMD	MD	XMD	MD	XMD
		9 kN/m	5 kN/m	10 kN/m	7 kN/m	10 kN/m	7 kN/m
		Elongation at maximum load	35%	35%	7%	7%	7%
	Elongation at break	50%	60%	45%	45%	50%	60%
ASTM D5147 Cold temperature flexibility	-25°C and -40°C	Pass @ -40°C		Pass @ -40°C		Pass @ -25°C	
ASTM D4073	Tear strength	380 N	265 N	410 N	375 N	360 N	265 N
ASTM E96 (Dry method)	Water vapor transmission	3.3 ng/Pa·s·m ² 0.060 perm		1.4 ng/Pa·s·m ² 0.025 perm		0.8 ng/Pa·s·m ² 0.015 perm	
ASTM E84-17 (INSONO AF3-130 + tiles)	Surface burning characteristics of building materials	Flame Spread Index	Smoke Developed Index	Flame Spread Index	Smoke Developed Index	Flame Spread Index	Smoke Developed Index
		—	—	—	—	0	0





ROBINSON TEST ASSEMBLY

- 12 in x 12 in (30 cm x 30 cm) ceramic tiles with sand and polymer grout ($\frac{1}{8}$ in joints)
- Polymer-modified mortar
- INSONO AF3-47 or INSONO AF3-90 or INSONO AF3-130 membrane applied to substrate
- INSONO AF3 ADHESIVE
- 2 in thick concrete slab

RESULT

Cycle 6 or 7:
Residential and Light commercial
(Office space, reception areas, kitchen and bath)

ACOUSTIC PROPERTIES

ASSEMBLIES	LABORATORY TESTS		FIELD TESTS	
	STC ⁽¹⁾	IIC ⁽²⁾	ASTC ⁽³⁾	AIIC ⁽⁴⁾
INSONO AF3-47 + ceramic tiles + concrete slab 8 in (20 cm)	—	—	55-58	26-30
INSONO AF3-47 + ceramic tiles + concrete slab 8 in (20 cm) + drop ceiling (1 gypsum board $\frac{5}{8}$ in (15.9 mm))	—	—	57-60	35-39
INSONO AF3-90 + ceramic tiles + concrete slab 8 in (20 cm)	53	47	53-56	52-56
INSONO AF3-90 + ceramic tiles + concrete slab 8 in (20 cm) + drop ceiling (ACOUSTIVIBE CDC + cellulose + 2 gypsum boards $\frac{5}{8}$ in (15.9 mm))	63	60	—	—
INSONO AF3-130 + ceramic tiles + concrete slab 8 in (20 cm)	56	50	—	—

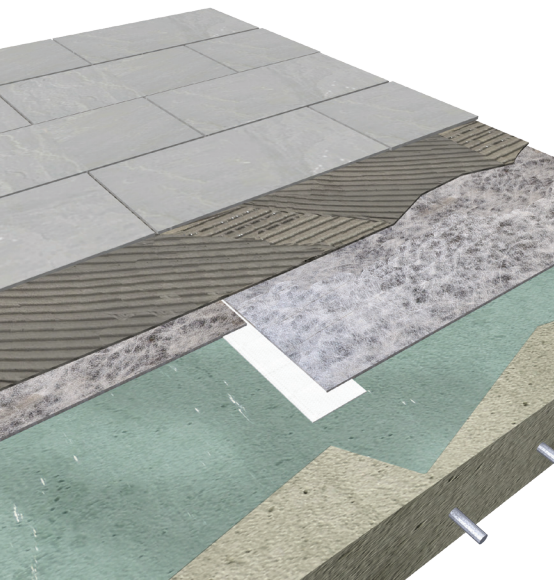
(1) STC : Standard test method for laboratory measurement of airborne sound transmission loss of building partition. Tests in compliance with the ASTM E90-09 standard.

(2) IIC : Standard test method for laboratory measurement of impact sound transmission through floor-ceiling assemblies using the tapping machine. Tests in compliance with the ASTM E492-09 standard.

(3) ASTC (FSTC) : Field Sound Transmission Class. Tests in compliance with the ASTM E336-11 and ASTM E413 standards.*

(4) AIIC (FIC) : Field Impact Insulation Class. Tests in compliance with the ASTM E1007-11 and ASTM E989-11 standards.*

*ASTC and AIIC results are presented for information purposes only. Equivalent performance cannot be guaranteed by SOPREMA and RESISTO.



INSTALLATION METHOD:

1. Position the **INSONO AF3** anti-fracture and acoustic membrane parallel to the side walls with the release film facing down to the floor. Unroll the membrane to a length of about 2 to 3 feet, and make sure that the membrane remains in the right position. Pull back the unrolled portion of the membrane backward on top of the rest of the roll. Prepare the concrete surface with **INSONO AF3 ADHESIVE** by **SOPREMA**. Follow SOPREMA's recommendations for required surface quality and product quantity. Cut and peel off the silicon release film from the section of membrane unrolled previously. On the wet adhesive, install **INSONO AF3-47**, **INSONO AF3-90** or **INSONO AF3-130** membranes parallel to the side walls. Then apply **INSONO AF3 ADHESIVE** on the other section of the roll, and install the rest of the roll on the wet adhesive. Install the membranes side-by-side without overlapping them while leaving a gap of 1/16 in (1.5 mm) between them. Once the membranes are installed, press firmly with a membrane roller to ensure good adhesion. Let cure for 2 to 6 hours depending on conditions. Check the good adhesion of the **INSONO AF3** membrane and then install ceramic tiles with approved polymer modified thin-set mortar. Refer to Section 09 30 13 – Ceramic Tiling.

2. For a waterproof installation, start with RESISTO's **REDZONE 25** or SOPREMA's **SOPRASEAL STICK 1100 TC** waterproofing strips 4 in (100 mm) wide before installing **INSONO AF3** membranes. Trace the installation pattern over the surface to be covered in order to properly position the waterproofing strips. Trace a line at 34 in (860 mm) for **INSONO AF3-90** or **INSONO AF3-130** or at 37 $\frac{3}{8}$ in (950 mm) for **INSONO AF3-47** starting where the first **INSONO AF3** membrane will be installed, which corresponds to the width of the **INSONO AF3** membrane, minus 2 in (50 mm). This line marks the edge guide over which waterproofing strips must be glued. That way, the **INSONO AF3** membranes will meet on the centre of the waterproofing tape. Trace next lines at 36 in (914 mm) for **INSONO AF3-90** or **INSONO AF3-130** or at 39 $\frac{3}{8}$ in (1,000 mm) for **INSONO AF3-47** from the previous line. Bond waterproofing strips along these guides with the recommended primer. Install **INSONO AF3** membranes following this pattern, in accordance with Step 1. **CAUTION: Do not apply INSONO AF3 ADHESIVE on top of waterproofing strips.**

3. For installation over concrete substrates, concrete must have cured at least 28 days before the membranes are applied. Moisture content of the slab must not exceed 3 lb/1,000 ft²/24 h (1.46 kg/93 m²/24 h) when tested with calcium chloride. For installation over wood substrates, plywood must be at least 1 $\frac{1}{4}$ in (32 mm) thick or be made of two plywood panels for a total of 1 $\frac{1}{4}$ in (32 mm) thick, glued and screwed together, all joints overlapping.

4. Restrictions: The **INSONO AF3** membranes must not be used on wood planks, wood fibreboard, OSB, plywood treated with oil, lauan plywood, Masonite, existing surfaces such as self-adhesive tiles, or laminated fibreglass, metal, or other surface of the same nature. **INSONO AF3** membranes must not be used on exterior surfaces and only **INSONO AF3-90** can be used on vertical surfaces. Do not use premixed products to bond the tiles to the surface of the **INSONO AF3** membranes.

5. Do not install **INSONO AF3** membranes on cracks larger than $\frac{3}{8}$ in (10 mm) wide.

APPROPRIATE SUBSTRATES

CONCRETE AND PLYWOOD

Note: The concrete must have a curing period of at least 28 days before the membrane is applied. If the membrane must be installed sooner, the moisture content of the slab must be no more than 3 lb/1.000 ft² (1.46 kg/93 m²) in 24 hours. This measurement can be done using a calcium chloride test, among others.

WARRANTY

SOPREMA soundproofing products are guaranteed against all manufacturing defects and to be suitable for all stated uses. SOPREMA's liability under this guarantee is limited to replacing or refunding the purchase price of SOPREMA soundproofing products found to be defective.

If you have any questions about this product or its installation, please contact your SOPREMA representative.

