

## TECHNICAL DATA SHEET

# PENOSIL Subfloor Adhesive 850

One-component, ready to use polyurethane foam adhesive that collapses to a gel after dispensing. It is used subfloor bonding in building and construction.

### Main benefits

- Replaces traditional adhesive
- Saves application time
- Strong bond with lumber and construction boards
- Limited post expansion for fast and precise installation of subfloors
- Fast curing
- Solvent-free
- Mold and mildew resistant
- Can be used with wet or frozen lumber
- Can prevent floors from squeaking
- Low VOC
- Tested according to ASTM D3498

### Fields of application

- Installing wooden subfloor and decking's
- Wood-to-wood horizontal assemblies
- Reducing the impact of thermal bridges

### Adhering

- Lumber and construction boards
- Wood
- Plywood

### Application instructions

#### Application conditions

Air temperature during use: +5°C to 30°C. Best results starting from 5°C. Test the sufficiency of adhesion at the place of application if using below 5°C.

Can temperature during application: +5°C to +25°C, best results at +20°C.

Foam can has to be warmed with water or air (max. +30°C) before starting work in low temperatures.

#### Surface preparation

Remove dust, loose particles and grease from the surfaces. Moisten dry substrate to ensure better results.

#### Application method

Shake the can vigorously at least 20 times. Hold the foam can in upright position, turn the gun to the can by holding the gun handle with one hand, and turn the can with the other hand. Make sure that the gun is not pointed at other persons when turning it. The can must not be screwed to the gun with the valve upside down or by turning the gun on the can. Turn the can upside down and start applying. The output of foam adhesive can be adjusted by the gun trigger.

Apply the adhesive in uniform beads centrally onto the mounting studs. Place the subfloor decking onto the adhesive within 10-15 minutes after dispensing. Do not remove and reapply panels as this will damage the adhesive structure and reduce the adhesive strength substantially. At high temperatures and low humidity in particular, curing can be accelerated by lightly spraying the adhesive bead with water. Once the panels are set, and while keeping pressure, secure the boards additionally with mechanical fasteners.

Do not load the subfloor decking to traffic within the curing time. Yield at 13 mm bead size 128 linear meters.

### Cleaning

Uncured foam adhesive can be removed with acetone, cured foam adhesive with mechanical means.

### Technical data

Properties	Value	Unit
Tack free time (EN 17333-3)	15...20	min
Fully cured (+23 °C)	<8	h
Temperature resistance of cured foam adhesive	-50...+90	°C
Fire class of cured foam adhesive (DIN 4102-1)	B3	
Shear strength (wet lumber) (ASTM D3498)	0,72	MPa
Shear strength (dry lumber) (ASTM D3498)	3,63	MPa
Shear strength (frozen lumber) (ASTM D3498)	2,43	MPa
Gap filling (ASTM D3498) (.062")	1,03	MPa
Gap filling (ASTM D3498) (.125")	0,97	MPa
Moisture resistance (ASTM D3498)	Pass	

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

### Technical classification and certificates

- Tested according to ASTM D3498
- M1 - low emission & odour
- EMICODE® EC 1 Plus - very low emission

### Colour

Yellow.

### Package

1000 ml aerosol can, content 750 ml, 12 pcs in a box.

### Storage conditions and shelf life

Guaranteed shelf life is 12 months from production date if stored in unopened packaging in a cool and dry place at +5°C to 30°C. The foam cans must not be stored above +50°C, nearby heat sources or in direct sunlight. Store and transport in a vertical position.

### Limitations

- The foam adhesive does not adhere to Teflon, polyethylene and silicon surfaces.

### Safety regulations

Use only in well-ventilated areas. Do not smoke during application! Use protective gear when necessary. Keep out of the reach of children. See label and safety data sheet (SDS) for more information.

Note: The instructions in the present documentation are based on tests carried out by the manufacturer and are presented in good faith. Due to variations in materials and substrates as well as the various application possibilities that are beyond our control, the manufacturer is not liable for the results achieved. In any case, it is recommended to test the product suitability at the place of application. Manufacturer reserves the right to modify products without prior notice.

This TDS replaces and supersedes all previous data sheets on the same product.