# **Technical Data Sheet**

Rev 3: November 2022



# SiegelBond MS70

### **Product Description**

**SiegelBond MS70** is a high-performance single part hybrid flooring adhesive, specifically formulated for ease of application and superior flooring performance and service life. Recommended for bonding most timber and engineered flooring systems in both timber to timber and

concrete to timber applications. SiegelBond MS70 is formulated as a 3 in 1 adhesive – moisture barrier and acoustic control - when used with a 5mm or 6mm V notch with 100% subfloor coverage.

#### **Product Advantages**

- **SiegelBond MS70** is rheologically optimised to be exceptionally smooth and easy to trowel.
- **SiegelBond MS70** is non-shrinking and non-slumping meaning trowel ridges hold firm.
- **SiegelBond MS70** is easy to clean of prefinished timber surfaces.
- **SiegelBond MS70** has a rapid strength build up and short curing time.
- SiegelBond MS70 is non-hazardous and low VOC compliant.
- **SiegelBond MS70** give as strong, elastic, and permanent bond to most wood flooring types.
- **SiegelBond MS70** is solvent and isocyanate free and is non-hazardous.
- **SiegelBond MS70** has optimal acoustic control characteristics exceeding BCA requirements.
- **SiegelBond MS70** once cured provides a permanent moisture resistant bond.

#### **Applications**

**SiegelBond MS70** is suitable for bonding most timber and engineered flooring systems to concrete, plywood, cured leveling compound, epoxy membranes, particle board and radiant heated subfloors.

#### **Technical Date**

Adhesive type	One Component MS Polymer	
Colour	Light Brown	
Maximum Tensile Strength	1.6 N/mm <sup>2</sup>	ASTM D412
Shore Hardness A	40	ASTM C661
Elongation at Break	180%	ASTM D412
Low VOC Compliance	Yes	SCAQMD Rule #1168
VOC content	< 10g/L	USEPA Method 24
Shelf Life	12 months	
Application Temperature	+15°c - +40°c	
Service Temperature	-20°c - +90°c	
Tack Free Time	20-40 minutes	
Working Time (25°c & 50% RH)	30 minutes	



# Subfloor Concrete Surface Preparation

- Ensure the subfloor surface is structurally sound, flat, smooth, clean, with no indentations and anti-adherents.
- Subfloor must be free of dust, dirt, grease, wax, loose paint, oil, sealers of any type, curing compounds, bond breakers, asphaltic residue, liquid adhesive remover, strippers, chemicals, or any other foreign substances that can potentially affect bonding. Cleaning the subfloor of loose particles with an industrial vacuum cleaner is recommended.
- If direct applying the adhesive to the subfloor, it must be flat to maximum 3mm over 3 meters, otherwise it will increase the risk of hollow spots and poor adhesion under the timber flooring.
- Any existing coating or adhesives must be completely removed. Mechanical treatment (e.g. shot blasting, grinding or sanding) may be required to achieve subfloor conditions mentioned above.
- It is recommended to assess slab moisture. If the slab is more than 5% moisture content measured with a concrete impedance moisture meter or more than 80% in-slab relative humidity, then additional means of protecting the floor from slab moisture is needed. Refer to moisture vapour protection properties of SiegelBond MS70 and the SiegelPrime P12 information sheet. Please discuss technical requirements with Siegel for any floors with high moisture or relative humidity readings
- Radiant heated subfloors should be turned off 24 hours prior to and during installation to prevent premature curing of the adhesive.
- Recommended air temperature during floor installation between 10°C 35°c and relative humidity between 40% and 80%, subject to the requirements specified by wood flooring manufacturer.

#### **Timber Subfloor Surface Preparation**

- For use over particleboard, all surfaces should be rough sanded, including sanding flat all joints. Ensure the surface is clean, dry, sound and does not squeak prior to laying the timber flooring.
- For use over clean plywood all joints should be sanded flat. Ensure the surface is clean, dry, sound and does not squeak prior to laying the timber flooring.

#### **Application Direction**

- Remove the lid and cut open the foil liner. Once liner is opened, we recommend using all the contents of the bag.
- Spread the adhesive with the proper notched trowel, apply uniformly on the subfloor. Avoid adhesive pools and excessive adhesive thickness by passing the trowel evenly through the adhesive at a 45-degree angle.
- Floor installation is by a full adhesive bed and to the flooring manufacturer's instructions.
- A minimum 80% adhesive contact of the adhesive to the board is recommended and if the adhesive is required to assist with moisture vapour protection then 100% coverage needs to be achieved. Place heavy objects to hold the flooring firmly in place during the curing time. If boards are bowed preventing adequate contact then it may be necessary to sort out and not lay such boards.
- When installing near a solid object or wall, leave the necessary room for expansion as outlined by the flooring manufacturer. Installing wood too tight against a stationary object will not allow room for normal wood expansion, which may cause a failure.
- If wedges or weights have been used during the installation to hold wood in place while adhesive dries, remove wedges after initial setting of the adhesive (approximately 2 hours) to allow for normal expansion of wood. Failure to remove wedges can cause the wood flooring to buckle and pop off the subfloor.

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- Restrict foot traffic for a minimum of 12-16 hours. Wait a minimum of 24 hours before sanding and polishing.
- SiegelBond can be cleaned up with acetone or mineral spirits when wet, noting that cured adhesive can only be removed mechanically.

# Moisture & Noise Control

- SiegelBond MS70 will achieve the BCA requirement of less than LnT, w < 62 based on a 200mm concrete subfloor. Typical reading on a 200mm subfloor is 48 - 51 LnT, w. when applied with a 6mm V notch trowel.
- 80% minimum coverage is required when using this product as an adhesive only.
- 100% coverage is required when used as an adhesive, moisture barrier and for optimal sound reduction. SiegelBond MS70 should be applied with a minimum of 5mm V notch trowel to guarantee moisture control at a coverage of 12-15m<sup>2</sup> per 15kg pail.
- Always lift a board at the beginning of and during installation to ensure coverage is meeting the above-mentioned contact coverage requirements.
- This product can provide protection from slab moisture vapour but does not eliminate all possible moisture related or installation related issues (e.g. water leaks, wet mopping, hydrostatic head or puddles).
- This product should not be exposed to water or alcohol cleaners before it is completely cured.

# Coverage

For further advise on recommended trowels discuss with your Siegel consultant. Please note the use of a 5mm V Notch trowel is required to guarantee moisture vapour protection:

Floor Type	Trowel	Coverage
Parquetry	V Notch 3mm	15 -18 m <sup>2</sup> per pail
Overlay Flooring	V Notch 4-5mm	8 -14 m <sup>2</sup> per pail
Strip Flooring	V Notch 4-5mm	8 -14 m <sup>2</sup> per pail
Engineered Flooring	V Notch 4-5mm	8 -14 m <sup>2</sup> per pail

The use of SiegelPrime Vapour Barrier in conjunction with SiegelBond flooring adhesive will allow for a higher coverage rate and overall lower project cost. For both concrete and timber subfloors, where moisture and sound control are not required, the use of a 3-5mm V Notch spaced trowel is sufficient. With the correct trowel this will provide a coverage rate of 12-15m2 per pail.

# Limitations

- Do not use on wet, dusty, contaminated, or friable substrates.
- Do not dilute the adhesive.
- Resistant only to the following: water, dilute acids, diluted caustic solutions, temporarily
  resistant to fuel, animal fats and oils, not resistant to organic acids, concentrated caustic
  solutions.
- Will not prevent damage to wood flooring induced by excessive moisture transmission due to environmental factors like water leaks.

#### Health & Safety

Health and Safety: Keep out of reach of children. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request. Users must first read the Safety Data Sheet. Users should familiarize themselves with all the safety aspects of the product prior to usage.

#### **Product Disclaimer**

Since the use and application of this product is beyond our control, we cannot be held responsible for product field performance. The information presented above is the result of our considerable experience with this product but is not to be construed as a performance warranty. In every case we recommend that the customer conducts their own testing and accordingly determines, to their satisfaction, its suitability for their purpose under the operating conditions in which they will use the product/s. For additional information, phone our Customer Service Centre on 1300 729 863. March 2021 - This Data Sheet supersedes those previously issued.

#### **Siegel Adhesives**

Phone: 1300 729 863 +61 2 4858 1771 Fax: +61 2 4869 3031 technical@siegeladhesives.com

#### Australian Head Office

Lv.6 / 10 Herb Elliott Ave Sydney Olympic Park NSW 2127 Australia

#### **New Zealand Head Office**

40 Onehunga Mall Onehunga Auckland 1061 New Zealand