Bona R848

Technical data sheet

Adhesives

Bona R848 is a one-component, moisture curing, water and solvent free, silane-based adhesive for engineered wood floors. Bona R848 provides outstanding adhesion to a variety of surfaces, and allows for the natural movement of wood flooring.

- Excellent “green grab” means the flooring stays in place
- No “memory” – Floor seams will not move apart
- Rapid shear strength development – Flooring is ready for furniture and foot traffic in one day
- Easy to clean – Will not harm the finish on pre-finished floors; will not stain hands
- Easy to apply – No arm fatigue
- Exceptional ridge stability provides maximum adhesive transfer
- GREENGUARD Indoor Air Quality Certified®
- Very low VOC – Meets the criteria for LEED EQc 4.1 (v. 2.1, 2.2, 3.0)
- California Proposition 65 Compliant
- Can be used with radiant heat systems

Technical data

Physical Characteristics:
Ingredients – Calcium carbonate, plasticizers, silane-modified prepolymer, amorphous silica
Base – Silane Modified-Prepolymer
Color – Grey
Density – 13.2 lbs./gallon
VOC Content – maximum content of 20
Shear Strength – 245psi (at final cure; lap shear test, 1mm gap)
Elongation – 300%
Moisture Levels – Moisture protection up to 6lbs or 80% RH, 3% Tramex or 1.8% CM
Odor – Non-offending
Flash Point – >100º C (212ºF) (Pensky-Martens)
Stability – 12 months from date of manufacture in unopened, original packaging
Packaging – 3 gallon (11.35 liter) containers

Application Characteristics:
Spread Rating – Easy to spread, maintains excellent ridge stability
Open Time- 30 minutes
Coverage – See “Trowel Notch Requirements” for spread rate
Curing – Light foot traffic - 8-10 hours
Furniture, fixtures - 12-24 hours
Unfinished floor sanding - after 24 hours

Recommended Use

Commercial and residential. Use with engineered prefinished and unfinished flooring; on, above or below grade[1]. May be used on both wood and concrete substrates[2].

[1]Read and follow flooring manufacturer instructions, recommendations and limitations as to the suitability of a particular flooring product to certain jobsite conditions and installation methods.

[2]After proper site conditions, moisture testing results and substrate preparation have been met. See “Directions for Use” for acceptable jobsite conditions.

Directions

DIRECTIONS FOR USE:

BEFORE USING, READ ALL DIRECTIONS AND MATERIAL SAFETY DATA SHEETS.

FOR TECHNICAL ADVICE: Call Bona US at 800/872-5515

APPLICATION: Use notched trowel (available from Bona)
Drying time: 24 hours under normal conditions
Coverage: 75-80 square feet per gallon when used for adhesion with moisture content below 3 lbs/24 hours/1000 square feet or 75% RH. 50-55 square feet per gallon when used for adhesion and moisture control up to 6 lbs/24 hours/1000 square feet or 80% RH. 100% COVERAGE/TRANSFER RATE IS REQUIRED FOR MOISTURE PROTECTION. To achieve 100% coverage rate, skim coat the floor utilizing the flat side of the Bona 1250G trowel to create a smooth surface free of voids. While skim coat is still wet, apply a second layer of Bona R848 with the Bona 1250G trowel using normal trowel on application.

ACCLIMATION AND SITE CONDITIONS: Acclimate adhesive and flooring to room temperature at the jobsite 72 hours before installation. Building climate control system must be functioning with a temperature of 65ºF - 80ºF and maximum relative humidity of 70% for 72 hours before flooring is installed, during installation, and for 72 hours after installation. Acclimate Bona R848 adhesive to room temperature of the installation, usually overnight.

MOISTURE TESTING: For concrete slabs, using standard application, conduct moisture testing per ASTM test methods F1869 *Test for Measuring Moisture Vapor Emission Rate (MVER) of Concrete Subfloor Using Anhydrous Calcium Chloride* and/or F2170 *Test Method for Determining Relative Humidity*

in Concrete Floor Slabs Using In Situ Probes. Contact ASTM International to obtain copies of the test methods before proceeding. **MVER using ASTM F1869 (Calcium chloride test) must not exceed 6 lbs/24 hours/1000 square feet. Relative Humidity using ASTM F2170 (RH Probe test) must not exceed 80%. If readings exceed limits, use Bona R580 Moisture Barrier according to label directions prior to application of Bona 848, or use Bona R851 or Bona R859 in place of Bona R580 and Bona R848.** When using a Tramex measuring device to identify moisture levels in cementitious based substrates, use the Tramex measuring device to find the highest reading in the area to be installed and then run the CM testing method where you have recorded the highest reading. As a general guideline for floors with no in-floor heating system, if the Tramex is 3% or below you may proceed with R848. However, the CM method must be used to make final determination of concrete moisture levels. For moisture content and quality of substrates, the guidelines of the wood floor manufacturer must be observed. For wood substrates, follow flooring manufacturer's guidelines including moisture content and required moisture measuring methods.

SUBSTRATE PREPARATION: Substrate must be clean, smooth, dry, free of loose material and structurally sound, with the surface slightly textured for best adhesion (similar to a light broom finished concrete). Remove adhesive residue, paint, concrete curing compounds or other contaminants that may affect adhesive bond. Sandblasting, shot blasting or scarifying may be necessary to completely remove some of these residues. Surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities must be filled or smoothed with a Portland Cement based patching and levelling compound. Substrate must be level to 3/16" in a 10 foot span. Do not install wood flooring before the compound has fully cured. Do not install over expansion joints or other moving joints in a concrete slab. Slab temperatures must be between 55º and 95ºF. Suitable substrates include concrete, plywood, cork, particle or chip board, stone, ceramic, terrazzo, radiant heat flooring (refer to manufacturer's recommended installation instructions) and dry above-grade gypsum underlayments. **Bona R848 may be used for glue assisted installations.**

PRODUCT LIMITATIONS: Bona R848 will not prevent moisture-related damages to wood flooring originating from the top, sides or ends of flooring (water leaks, puddles, hydrostatic head, etc.) nor does it eliminate other moisture or installation related issues such as improper acclimation of flooring or the effects of jobsite temperature and humidity.

DO NOT USE BONA R848:

- On solid glue down installations – for use with engineered flooring only
- On wet, contaminated or friable surfaces
- Over concrete curing compounds, sealers or other surface treatments that could affect adhesion
- On areas subject to hydrostatic head
- On cutback residue, or over vinyl/VCT
- On chemically treated woods (stain, preservatives, etc.)
- As a leveling compound

TROWEL NOTCH REQUIREMENTS (Spread rates are approximate):
Replace as needed to achieve proper spread rate.

Suggested Notched Trowel for Maximum Coverage of Adhesive

	Description	Use	Size	Coverage Rate
	Bona R848 Trowel	Engineered flooring, maximum 5/8" thick and 5" width	7/32" x 13/64" x 25/64" V-notch	75-80 sq.ft./gallon for adhesion only
	Bona 1250G Trowel	Engineered flooring, maximum 5/8" thick and 5" width	1/4" x 1/4" x 7/16" V-notch	60-65 sq. ft./gallon or 50-55 sq. ft./gallon for moisture protection and adhesion

SPREADING ADHESIVE AND LAYING FLOORING: Spread adhesive on the substrate while holding the Bona trowel at a 90º angle, using a smooth semicircular motion. Do not leave any puddles of adhesive. Set the flooring into adhesive while the adhesive is still wet. Do not allow more than 30 minutes of open time before setting flooring into the adhesive. Higher humidity can decrease open time. DO NOT SET FLOORING INTO ADHESIVE THAT HAS SKINNED OVER. REMOVE ADHESIVE AND REAPPLY.

Maintenance

CLEAN-UP: Clean adhesive from the surface of the floor immediately, while wet. Use mineral spirits on a clean white cloth.

STORAGE: Store in a climate controlled environment. Keep from freezing. Do not store for extended periods in excess of 90ºF.

Order Information

Item#	Size	#/Case	Lbs./Case
BR84806100USBO	3 gallon	1	40