

POWERBOND NG® INSTALLATION INSTRUCTIONS
1.83M WIDE RS ROLL GOODS

GENERAL NOTES

Tandus Centiva Powerbond NG® products should be treated and installed as a resilient floorcovering and is intended for inside installations on dry, properly prepared floors. The product is not intended for installation on walls, ramps, outside, or on wet surfaces.

Tandus Centiva is not responsible for any product failure caused through poor floor preparation, moisture related issues, or where problems arise through these installation procedures and the relevant Australian Standards not being followed. Use only installation materials approved by Tarkett Australia. See shipping container for details on shelf life and freeze-thaw stability of the Powerbond NG® installation materials. The instructions in this document do not cover all floor conditions. If you have questions concerning these instructions or about the stability of Powerbond NG® over surfaces or under conditions not covered by these instructions, please contact your Tarkett representative.

All Powerbond NG® products should be inspected for dye lot, style, colour, size, quality and shipping damage prior to installation. **Do not install Powerbond NG® if any problems are noted and notify your Tarkett Account Manager immediately to report any problems.**

The installation of all Powerbond NG® products shall conform to the intent of these installation instructions as well as the following Australian flooring Standards:

- AS 2455.1:2007
- AS 1884-2012

Installer Certification

Tarkett Australia provides a certification program for installers of Powerbond floorcoverings. Additionally, Tandus Centiva requires that all installers be certified prior to installing any Powerbond NG® products. Contact your Tarkett Account Manager in your area for more information on installation certification.

Determining the Suitability, Dryness and Alkalinity of Subfloors

It is the responsibility of the installation contractor to test the floor to make certain it is properly prepared and ready for installation of all Powerbond NG® products and this is a critical factor in a successful installation.

Excessive floor moisture within the concrete and/or high floor pH (alkalinity) on any floor can cause product failure and therefore all concrete slabs should be tested for moisture and pH regardless of age or grade level.

When using Powerbond NG®, Tarkett requires that at least 3 RH and pH tests be performed on the initial 100m2 of each project. In addition, a minimum of one RH and pH test, per 100m2 is required for the balance of the project.

Note that RH and pH testing indicate the moisture level and pH of the concrete sub-floor at the time of installation. These tests do not provide static results and both the RH and pH can increase/decrease over time and both can be affected by outside influences. Tarkett is not responsible for product failure as a result of changes to sub floor conditions, including increases in RH or pH levels, post installation. Experience has shown that more accurate and representative RH and pH testing results can be achieved when the HVAC system is functioning 24/7 for two weeks prior to installation and the indoor air quality has acclimated to occupancy conditions.

pH Testing

pH testing shall be in conjunction with these instructions and the pH test strip manufacturer's recommendations.

Preparing the surface of a concrete slab for pH testing requires the following attention to detail. Make sure the concrete surface is adequately cleaned of any adhesives, primers, curing compounds, surface contaminants, etc. Exercise care not to over clean the surface of the concrete removing the thin layer of carbonation. This can result in higher, inaccurate pH readings. Slightly wet the concrete sub-floor surface with a small amount of distilled or deionized water and allow the water to stand for one minute. Apply pH test paper to the wet concrete surface and allow the pH test paper to remain in contact with the wet area for one minute. The pH test paper will change color depending on the pH of the wetted surface and a color scale is provided with the pH test papers for comparison.

If the surface of the concrete is burnished or non-porous, mechanically removing the surface will result in a higher non representative pH level of the concrete. In all cases pH testing should be done just prior to the installation so that the pH readings taken are those of the concrete's surface that the adhesive is being installed over. pH testing of a sub-floor that has been mechanically abraded will result in higher pH readings that must be addressed prior to installation. Note the pH test papers used must measure up to a pH of 14.

When installing Powerbond NG® any smooth, burnished, or non porous surfaces will require lightly sanding with a floor buffer and a fine grit sanding pad in order for the Mapei Ultrabond Eco 380 Adhesive to have a slightly rougher profile to bond with. In this instance pH testing should be performed after the floor has been lightly sanded to assure accurate results.

Installation of Powerbond NG® products on sub-floor conditions that exceed the specifications and limitations provided in this document will void the applicable limited warranties. Tarkett does not represent or make any express or implied warranties that Powerbond NG® products will or will not affect, prevent or cure any other moisture or alkalinity-related issues that may arise because of the moisture and alkalinity levels found in the concrete. Tarkett expressly disclaims such express or implied representations or warranties

Timber - The moisture content of timber, plywood or particleboard subfloors can be determined with an electrical resistance type moisture meter.

Variations of up to 5% in moisture values can occur depending upon the species type and temperature of the timber. Please refer to AS/NZS 1080.1:2012 for the temperature and moisture content correction for the different timber species.

While it is problematic to specify exact percentage thresholds, a percentage reading above 15% would indicate a higher than acceptable level of moisture.

Temperature and Humidity

The area in which Powerbond NG® is to be installed (including the floor) should have a minimum temperature of 15° Celsius for at least 24 hours prior to installation. All Powerbond NG® products and installation materials should be stored at this temperature for at least 24 hours prior to installation. This temperature should be maintained for 24 hours after installation. The temperature should not exceed 28° Celsius. Relative humidity above 65% will retard primer and adhesive set times.

FLOOR PREPARATION

Floor inspection

Prior to installing Powerbond NG® the sub-floor must be structurally sound and dry. Any curing agents, chemicals, sealers, finishers or other chemical treatments used on sub floors must be chemically and physically compatible with the Tandus Centiva backing and adhesive systems, or they must be mechanically removed prior to any adhesives or levelling compounds being applied to the sub-floor. Chemically abated floors or the use of chemical adhesive removers prior to the application of Tandus Centiva backing and adhesive systems can result in product or installation failures and are not recommended nor warranted. If you have questions concerning the compatibility of specific chemicals with Tandus Centiva backing and adhesive systems please contact your local Tarkett representative.

Floor Debris Cleaning

Clean the floor of all excess concrete spots, solid debris or paint spots using suitable scraping methods. Completely remove all wax, dirt, grease, paints. Any old pre existing adhesives must be completely removed down to clean bare concrete (especially cutback or emulsion). DO NOT use solvents to clean the floor. DO NOT use oil based sweeping compound. Contact Tarkett for specific floor preparation guidelines for installation over the cutback or general-purpose adhesives.

Floor Preparation and Levelling

All floors should be level to assure a good Powerbond NG® installation. Concrete floors should be trowelled smooth and should conform to the relevant Australian Standards specifications. The subfloor should be flat and all cracks, chips, gaps holes, and depressions shall be filled to conform to AS 2455.1:2007. DO NOT install over loose tile (VAT*, VCT, or others).

The floor, after preparation, should be of a condition so as that:

- (a) *Planeness* When a straightedge 2.0 m long is placed at any position at rest on the surface, no part of the surface shall be more than 4 mm below the straightedge.
- (b) *Smoothness* When a straightedge 150 mm long is placed at any position at rest on the surface, no part of the surface shall be more than 1 mm below the straightedge.

Cornice plaster or water based putty must not be used to fill or patch the subfloor.

Floor Cleaning

Sweep and vacuum the floor after patching and debris removal. Do not use oil, or silicone based sweeping compound. Make sure all perimeter areas are clean. Smooth non-porous floors should be damp mopped prior to product installation.

Powerbond NG® will adhere to smooth surfaces. It has a significantly stronger affinity for smooth surfaces than rough, porous, sanded, or abraded surfaces. When installing over a pre-applied moisture barrier, the surface should be prepared to comply with the instructions of the manufacturer of the moisture barrier. With a smooth two part epoxy moisture barriers they will typically apply a primer to the surface of the epoxy, and a layer of Portland cement, or other cementitious material over the epoxy. That surface should be smooth so that the Powerbond NG® will easily adhere.

When installing Powerbond NG® any smooth, burnished, or non porous surfaces will require lightly sanding with a floor buffer and a fine grit sanding pad in order for the Mapei Ultrabond Eco 380 Adhesive to have a slightly rougher profile to bond with. A smooth surface will not provide enough grab for the Mapei Ultrabond Eco 380 Adhesive to adhere the Powerbond® backing. All smooth surfaces should be sanded (as a minimum) using a medium grit paper to de-gloss the surface.

Floor Priming (Concrete Subfloors)

All porous, gritty, chalky and dusty surfaces should be primed using RLA GS 400 Floor Primer or equal. All patched areas must be fully primed. Gypsum based patches are not acceptable. Surfaces that are non-porous do not require primer. These surfaces must be cleaned as noted above.

The Floor Primer can be applied using a paint roller and then allow the primer to dry completely. The Primer should not transfer to hand when dry.

When cutback or emulsion adhesives have been removed from the floor, or any other pre-existing adhesive has not been completely removed down to bare concrete the floor must be skim coated with a Portland cement or other Tandus Centiva approved acrylic latex fortified patching material, and allowed to dry completely. Contact Tarkett Australia for details on covering cutback adhesive.

Pre Installation Requirements

Should the installation contractor consider the subfloor or project conditions to be unsuitable for the installation of any Powerbond NG® product they are to submit a report in writing to the purchaser, and where appropriate, the builder. The report is to state the following:

1. Why the subfloor is unsuitable for the installation of the Powerbond NG® product
2. What rectification works need to be undertaken to ensure the subfloor is fit to have the Powerbond NG® product installed
3. Costs associated with the rectification works
4. What (if there are any) other issues onsite that may stop the Powerbond NG® product being installed to the manufacturers specification and relevant Australian Standards (i.e. temperature, moisture, etc)

A copy of this report should be supplied to Tarkett Australia for their records once this issue has been noted to the purchaser.

Floorcovering Plans

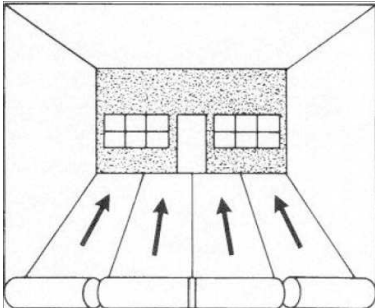
There shall be consultation, (preferably from the early design stages through completion), between all parties concerned with the works onsite (i.e. purchaser, architect/designer, builder/developer, tenant, etc) in regards to the direction that the Powerbond NG® product is to be installed and any other such issues.

All Powerbond NG® products should be installed in one direction unless approval has been received by the installation contractor from the purchaser, prior to the installation commencing.

As per AS 2455.1:2007, prior to the installation of any Powerbond NG® products the purchaser shall be supplied with a set of marked up drawings showing the placement of all seams and cross-joins, for sign off by the purchaser.

Installation of a Powerbond NG® product on a floor outside the specifications provided in this document will void the applicable limited warranties, could result in failure of the adhesive, floor primer or product, and could have an adverse impact on the indoor air quality.

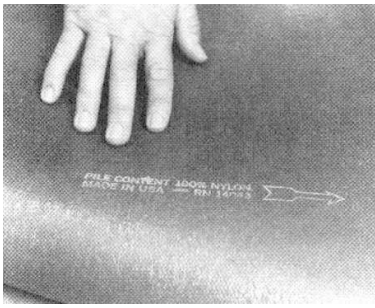
INSTALLATION



Prior to the installation of the Powerbond NG® product, determine the lay direction of the carpet based on building design and installation efficiencies.



- 1** Place (snap) a white chalk line in the centre of the room in the lay direction. Do not use blue or red chalks as those colour chalks can discolour the face fiber.



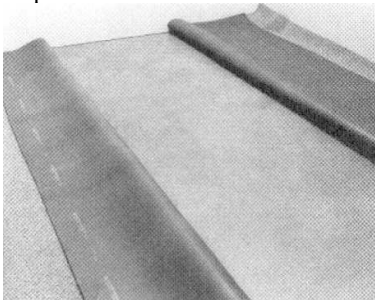
2 Roll out the Powerbond NG® carpet face up with the arrows painted on the back pointing in the same direction. Lay out carpet so seams run toward main light sources when possible.



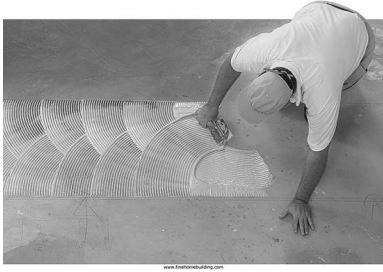
3 Lay the first breadth of carpet with the edge on the chalk line. Allow the ends and edges of carpet (as needed) to run up the wall a minimum of 5cm for later trimming. Roll out the second breadth of carpet with the common edge overlapping the first breadth of carpet a minimum of 5cm for the straight cut or for a slight serpentine cut.



4 The above-described procedure can be followed to dry-lay the carpet in a room or work area. Allow a 5cm (straight or slight serpentine cut) overlap at the butt ends of all rolls and anywhere a seam is required.



5 On the first seam only, working with two breadths of carpet, fold back one third of each breadth of carpet (lengthwise) exposing the chalk line. Start folding back from one end of the carpet to prevent shifting. This procedure is referred to as “1/3 – 1/3 start”. This procedure sets up all remaining seams in either direction for the “1/3 – 2/3” installation system.



6. Select the appropriately notched trowel 1/16" x 1/16" x 1/16" (1,5 x 1,5 x 1,5 mm). Spread adhesive evenly over the subfloor, keeping the trowel at a 45° angle to the subfloor. For working time and flash time, **Flash** 25 minutes **Working Time** 2 hours.



7 Starting from the centre of the first breadth of carpet, feed it onto the floor in a continuous, rolling manner. The edge of the carpet should be the last section of material to feed onto the floor.



8 Roll the first breadth of carpet using a 35-45kg roller starting from the centre of the breadth and rolling straight to the seam.



9 Feed the second breadth of carpet onto the floor. Make sure the overlap onto the first breadth is maintained.



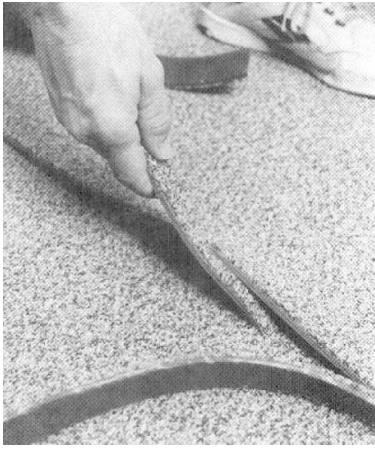
10 Roll the second breadth of carpet using a 35-45kg roller starting from the centre of the breadth and rolling straight to the seam.



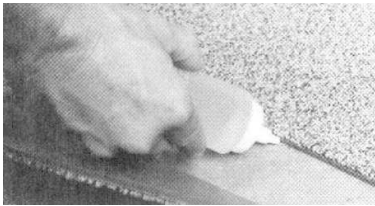
11 Adjust the Tarkett Seam Trimmer so the back (second) knife blade cuts through both pieces of Powerbond NG® carpet and lightly touches the floor. A sharp heavy-duty utility blade is required to successfully complete this procedure.



12 Determine the pile lay direction of the carpet and cut in the "smooth" direction. Using firm pressure on the knife-body cut through both breadths of carpet in one fluid, continuous motion. Double cut down the middle of the overlap for a straight cut (5cm overlap). Do not allow the knife to track off the top of the carpet. Use a carpet-trimming knife to double cut up to the walls and structural members.

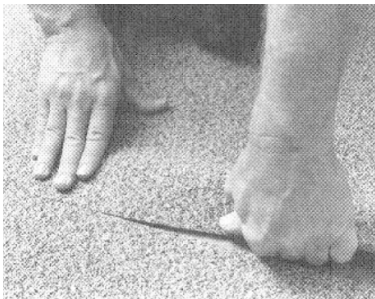


13 Remove top and bottom strips. (Take caution to avoid adhesive transfer to the face of the yarn when removing bottom salvaged edge)

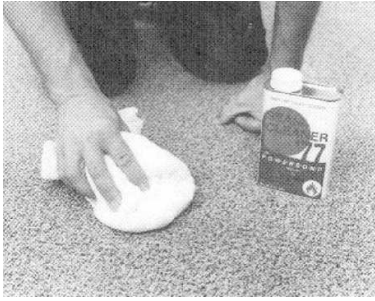


14 Hold back one edge of Powerbond NG® and apply a thin bead of Roberts 5601 Seam Weld (approximately 4mm wide for cushion backed and 2mm for condensed backed) to the backing only of the carpet on the floor. Seam Weld is only required on one side of the carpet. Note: RLA Roberts 5601 Seam Weld is a fast drying sealer.

Please Note: The correct application and amount of seam weld is critical to ensure an impermeable moisture barrier on all seams and cross-joins. Failure to apply the correct amount of seam weld could void the manufacturer's warranty on the Powerbond NG®.



15 make up the seam starting at the centre of the seamed line. Use a sliding motion to push the second breadth of carpet onto the seam and Seam Weld. Avoid pushing the carpet down into the Seam Weld as this may push the Seam Weld away from the seam and result in a poor seam. Do not get any seam weld on the face of the yarn.



16 As needed, use a clean, white, dry, absorbent cloth and an appropriate Seam Cleaner to clean up any excess Seam Weld. Seam Weld must be cleaned up immediately. Place the Seam Cleaner on the cloth. **DO NOT** saturate. **DO NOT** apply seam weld to carpet. Blot gently to remove the excess seam weld.



17 Roll the completed seam lightly using a carpet tractor.

The above-described methods are necessary to complete all required lengthwise, butt or end seams.

TRIMMING



When trimming the carpet to a wall or other vertical surface use a stair tool to force the carpet into the corner formed by the wall and floor. Trim off excess using a carpet trimming razor knife.

To ensure the best results

To ensure the best possible finish for the end client, Tarkett Australia recommend that the installation should be planned using production batches in sequence whenever possible. Following are the steps to be taken throughout the installation:

1. The Powerbond NG® products and installation materials should be conditioned at a temperature between 15° C - 28° C a minimum of 24 hours prior to the installation to enable it to be brought to the temperature of the area it is to be installed in
2. The Powerbond NG® should be dry laid in each room, corridor, etc it is to be installed in
3. All seams/cross joins on the project are to be completed with RLA Roberts 5601 Seam Weld
4. All trimming on the project should be completed
5. Where required, the application of silicone around the perimeters is to be completed last

All Health and Aged Care installations (subject to urine) are to be installed into a beading of external silicone edge finish (all perimeter walls).

All PVC reducing strips are to be fixed to the substrate with the appropriate contact adhesive. The edge between the Powerbond NG® and PVC reducing strips require seam sealer application

GENERAL NOTES

Exposed Edges of Powerbond NG® should be protected with edge reducing strips of the correct thickness.

Air Pockets/Bubbles/Creases/Pile Crush. Air pockets and bubbles can be addressed by puncturing the carpet with an awl and pushing air out from under the Powerbond NG® and pushing it down into contact with the floor. Pile crush can be corrected or improved by using a wallpaper steamer and a carpet pile lifter. For creases a household domestic steam iron can be used to iron the creases flat. The steam iron is NOT to be placed directly onto the surface of the carpet. The iron is placed over an extremely wet clean white absorbent towel. Instructions are available for this process. (Please refer to Tarkett for further instructions and advice, and do not proceed without discussion and advice).

EQUIPMENT NEEDED

Necessary Tools

- Tarkett Seam Trimmer
- Heavy Duty Utility Blades for Tarkett Trimmer
- Carpet Tractor
- 1.83m Straight Edge
- Heavy Duty Utility knife
- Carpet awl
- 30m Tape measure
- 35-45kg Roller
- Floor Scraper
- Vacuum Cleaner
- Push Broom
- pH Test Paper
- Nap Shears
- 30m Chalk Line
- Hygrometer

INSTRUCTIONS FOR Tarkett DUAL BLADE SEAM TRIMMER

1. Release blade hold down screw for second slot
2. Insert heavy-duty utility blade in 45-degree second slot (at the rear of the seam trimmer). Be certain the blade is inserted between the metal blade holders-the side of the blade will not show through the clear acrylic trimmer hander. This blade should be set at the depth or thickness of both pieces of the Powerbond NG®.
3. Blade should always be set so they just touch the floor (when double cutting seam). *Caution: Blades set too long will bend or flex, giving a bevel cut an unacceptable seam.*
4. Adjust blade hold down screw.



Heavy-duty utility blade

Required Sundries

- RLA Roberts 5601 Seam Weld - No Substitute
- RLA Seam weld remover
- RLA Applicator Bottle
- Roberts GS 400 Floor/Wall primer
- Clean White Absorbent Cloths
- Mapei Ultrabond Eco 380 Adhesive
- Ultrabond Eco 380
- Ultrabond Eco 350
- Roberts 2000 Universal
- Roberts 285 FR Universal

Repairs

1. Cut out the damaged or stained area with a circle tool
2. Carefully remove the subject piece
3. Clean the floor
4. Cut another attic stock piece of Powerbond NG® with the same circle tool
5. Apply additional adhesive and RLA Roberts 5601 Seam Weld in a thin bead around the cut edge of the open circle on the floor
6. Install the new piece of Powerbond NG® into the opening (make sure to maintain the same pile direction)
7. Set the repair piece into place with a carpet tractor
8. A larger area can be repaired by double cutting. Attention should be paid to the selection of the carpet for the repair if the carpet has a pattern. Double cut the replacement carpet into the installed carpet using slight serpentine cuts.

*A dull blade on the double cutter or a carpet-trimming knife can cause ragged cuts and seams. Make sure all blades are very sharp.

References

1. AS 2455.1:2007 – Textile Floorcoverings – Installation Practice Part 1
2. AS 1884-2012 Floorcoverings – Resilient sheet and tiles – Laying and maintenance practices