



Unsquashable™ Padding

www.UnSquashablepadding.com

1-800-731-3483 Ext. 715

New UnSquashable™ Padding Product – GrandPlush™ 1/2" CARPET CUSHION WITH BONDTECH™ FABRIC

DOUBLE-GLUE INSTALLATION GUIDELINES

An Overview of the Double Glue Method

The double glue installation method is a standard approach to cushioned carpet installation in commercial and specialty applications. The process involves adhering the cushion to the subfloor, followed by adhering the carpet to the installed cushion using adhesives specifically designed and approved for double-glue installations.

UnSquashable™ Padding has developed a prototype 1/2" carpet cushion featuring BondTech™ Fabric and a 10 lb. density polyurethane foam construction in response to customer requests for a thicker, more comfortable cushion suitable for select double-glue applications. Unlike traditional UnSquashable™ Padding Carpet Cushion products designed exclusively for stretch-in installations, the BondTech™ Fabric utilizes a polyester fiber needled polypropylene construction engineered to mechanically lock to the polyurethane foam during manufacturing, significantly increasing fabric-to-foam delamination resistance.

This prototype product is intended for up to light commercial and specialty open-area installations where enhanced underfoot comfort is desired and rolling wheel traffic is minimal or non-existent. Recommended applications may include mosques, temples, worship facilities, meditation areas, hospitality lounge spaces, and similar environments.

Because this is a prototype product with limited long-term field history, installers and end users should carefully evaluate the suitability of the product for the intended application prior to installation.

Carpet installation should be performed by professional installers with specific training in commercial double-glue carpet installation. Additional information relevant to the installation of commercial carpet can be found in CRI 104 — Standard for Installation of Commercial Carpet published by the Carpet and Rug Institute.

Cushion Selection

The UnSquashable™ Padding 1/2" Prototype Carpet Cushion with BondTech™ Fabric which we are now calling, GrandPlush™ Carpet Cushion is specifically designed for select double-glue applications requiring enhanced underfoot comfort.

PRODUCT	DENSITY (LBS/CU. FT.)	THICKNESS
GrandPlush™ Carpet Cushion Prototype with BondTech™ Fabric	10 lb.	1/2"

Recommended Applications

- Mosques & Temples
- Worship facilities
- Meditation spaces
- Hospitality lounge areas
- Specialty open-area installations
- Low traffic gathering spaces

Not Recommended For

- Office environments with rolling chairs
- Modular carpet tile installations
- Healthcare facilities
- Airports
- Educational facilities
- Retail main aisles
- Corridors or hallways
- Areas subject to carts or rolling equipment
- High traffic commercial applications
- Areas with concentrated rolling loads

BondTech™ Fabric Technology

Traditional carpet cushion constructions designed for stretch-in installation may not provide adequate delamination resistance for double-glue applications due to the stresses created when adhesive is applied to both the subfloor side and carpet side of the cushion.

BondTech™ Fabric utilizes a polyester fiber needled polypropylene primary engineered to mechanically bond with the polyurethane foam during manufacturing. During the foaming process, the polyurethane foam penetrates and mechanically locks to the polyester fiber matrix, dramatically increasing fabric-to-foam bond strength and improving suitability for double-glue applications.

Cushion Performance Considerations

While the 10 lb. density polyurethane foam construction provides enhanced support and improved resistance to compression compared to typical carpet cushion products, the 1/2" thickness of this prototype cushion may allow greater dynamic movement under concentrated rolling loads than thinner double-glue cushion systems.

Accordingly, this product is intended primarily for open-area applications with pedestrian foot traffic and limited rolling load exposure.

Prototype Product Limitations

This product is classified as a prototype installation system with limited long-term field performance history.

UnSquashable™ Padding makes no representation that this product is suitable for all commercial double-glue applications. Suitability must be evaluated based upon:

- Traffic conditions
- Carpet construction
- Rolling load requirements
- Maintenance practices
- Subfloor conditions
- Environmental conditions

Rolling Load Restriction

This product is not recommended for installations subject to:

- Rolling office chairs
- Casters
- Carts
- Maintenance equipment
- Frequent rolling traffic
- Concentrated point loads

Long-term rolling wheel traffic may result in excessive compression, premature wear, seam peaking, delamination, or reduced installation performance.

For installations requiring rolling-load performance, UnSquashable™ Padding recommends LSI 300 or LSI 101 products specifically engineered for commercial double-glue applications.

Adhesive Selection & Compatibility

Only adhesives specifically approved by the adhesive manufacturer for double-glue carpet cushion installations should be utilized.

All adhesive manufacturer installation instructions, flash times, open times, environmental conditions, and trowel recommendations must be strictly followed.

IMPORTANT:

Adhesives must be thoroughly mixed prior to application in accordance with adhesive manufacturer instructions. Failure to properly mix adhesives may result in inconsistent bond performance.

UnSquashable™ Padding does not recommend any individual adhesive manufacturer. However, premium multi-purpose adhesives specifically engineered for double-glue carpet installations are recommended.

Trowel Sizes & Recommendations

Verification of trowel settings and open time should be referred to the adhesive manufacturer. These trowel guidelines are provided for reference when specific recommendations are not available from the carpet manufacturer or adhesive supplier.

APPLICATION	NOTCH WIDTH	NOTCH DEPTH	SPACE BETWEEN NOTCHES	NOTCH SHAPE
Cushion to Subfloor	1/8"	1/8"	1/16"	U-Notch
Cushion to Carpet (Smooth Back)	1/8"	1/8"	1/16"	U-Notch
Cushion to Carpet (Rough/Textured Back)	1/8"	3/16"	1/8"	U-Notch

Rough concrete surfaces and heavily textured carpet backings may require larger trowel notch configurations.

Pre-Installation Considerations

Moisture & Alkalinity Testing

Moisture testing should be performed in accordance with:

- ASTM F1869 Calcium Chloride Test
- ASTM F2170 In Situ Relative Humidity Test

As a general guideline:

- Moisture vapor emissions should not exceed 5 lbs./1000 sq. ft./24 hrs.
- Relative humidity should not exceed 80%
- Concrete pH should be between 5 and 9

Always follow the carpet and adhesive manufacturer's requirements where more restrictive.

Site Conditions

The installation area must be climate controlled.

Maintain:

- Temperature between 65°F and 95°F
- Relative humidity between 10% and 65%

Conditions should be maintained beginning 48 hours before installation and continuing at least 72 hours after installation.

IMPORTANT INSTALLATION ORIENTATION

UnSquashable™ Padding Prototype GrandPlush™ Carpet Cushion with BondTech™ Fabric *must be installed with the BondTech™ fabric side facing the subfloor* unless otherwise approved by UnSquashable™ Padding in writing.

Mock-Up Installation Requirement

Prior to full installation, UnSquashable™ Padding strongly recommends installation of a representative mock-up area utilizing:

- Actual carpet specified for the project
- Actual adhesive system

- Actual substrate conditions
- Actual installation methods

The mock-up should be evaluated for:

- Adhesion performance
- Seam appearance
- Dimensional stability
- Comfort
- Traffic performance
- Overall suitability for intended use

Proceeding with installation constitutes acceptance of product suitability by the installer and end user.

Immediately Following Installation

- Prevent foot traffic on the newly installed floor for a minimum of 24 hours.
- Prevent rolling wheel traffic for a minimum of 72 hours.
- Exposure to water from cleaning and other sources should be restricted for a minimum of 30 days.
- Dry cleaning systems are preferred.
- Heavy furniture should not be moved onto the installation until adhesive systems have fully cured.

Industry Standards & References

These installation guidelines are intended to supplement:

- CRI 104 Standard for Installation of Commercial Carpet
- Carpet manufacturer installation guidelines
- Adhesive manufacturer installation guidelines
- ASTM F710 Standard Practice for Preparing Concrete Floors
- ASTM F1869 Moisture Vapor Emission Testing
- ASTM F2170 Relative Humidity Testing
- Carpet Cushion Council Double-Glue Installation Guidelines

Where conflicts exist, the most restrictive requirement shall apply.

Summary

These installation guidelines have been prepared to provide guidance for the installation of UnSquashable™ Padding GrandPlush™ Carpet Cushion 1/2" Prototype with BondTech™ Fabric in select double-glue applications.

Due to the prototype nature of this product and the wide range of installation conditions beyond UnSquashable™ Padding control, no warranty, either express or implied, is made regarding the performance of this product in all applications.

Installers and end users are responsible for determining the suitability of this product for the intended application and must follow all applicable industry standards, carpet manufacturer requirements, adhesive manufacturer guidelines, and local building codes.