

Leggett & Platt® Flooring Products

DOUBLESET®

Architectural Presentation

Why Specify a Commercial Cushion Under Carpet?

- Appearance Retention – Prolongs the life of a carpet by as much as 60%.
- Noise Reduction – Acoustical properties of cushion reduce sound transmission.
- Energy Savings – Cushion is a great insulator.
- Reduces Fatigue – Excellent support for heavy foot traffic.

Why Specify a Double-Glue-Down Installation?

- Double-glue-down installations eliminate problems associated with stretch-in and direct-glue-down methods. Stretch-in installations often experience wrinkling, seam-peaking, pattern distortion, and carpet delamination. Direct-glue installations cause pile height loss in carpet and simply “ugly out.”
- Double-glue-down installations are cost-effective and benefit the environment. The following lifecycle analysis shows double-glue as the better value:

End-User Comparison (per ft ²)		Direct-Glue	Double-Glue
Carpet Cost		\$2.50	\$2.50
Cushion Cost		\$0.00	\$0.90
Installation/Adhesive Cost		\$1.70	\$1.90
	Total	\$4.20	\$5.30
Average Life (Years)		5	8
Average Annual Cost		\$0.84	\$0.66

Why Specify DOUBLESET?

- Unique construction – Environmentally safe, recyclable, and passes the CRI Green Label Plus indoor air quality carpet cushion testing program.
- Contributes to LEED® Project Certification (Leadership in Energy and Environmental Design).
- Fresh Dimension® antimicrobial – Inhibits the growth of mold, mildew, and odor-causing bacteria.
- Performance – Resists bottoming out more effectively than competitive products.

- Budget-friendly – Competitively priced.
- Wearability – Approved for Class III extra-heavy traffic.

Product	Traffic Classification/Application
DOUBLESET 62 oz	Class III extra heavy – all areas (great for wheel traffic)
DOUBLESET 68 oz	Class II heavy – most areas (more luxurious feel)
DOUBLESET 80 oz	Class III extra heavy – all areas (great for wheel traffic)

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Commercial Cushion Traffic Classifications

To help you compare “apples to apples” with different types of cushion, the Carpet Cushion Council established recommended minimum criteria for each type of carpet cushion:

Construction	Characteristics	Class III Extra-Heavy Traffic	Class II Heavy Traffic
Bonded Urethane	Density, lbs/ft ³	8.0	6.5
	Thickness (in.)	0.25	0.25
	CFD @ 65%	8.0 psi	6.0 psi
Flat Rubber	Density, lbs/ft ³	26.0	21.0
	Weight, oz/yd ²	62.0	62.0
	Thickness (in.)	0.150	0.150
	CR @ 25%	4.0 psi	3.0 psi




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PRODUCT INFORMATION	DOUBLESET® 62 oz	DOUBLESET® 68 oz	DOUBLESET® 80 oz	TEST STANDARD
SPECIFICATIONS				
Application	Commercial use	Commercial use	Commercial use	
Material Type	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber	
Product Codes	BV0025	BV0026	BV0027	
Thickness, inches	5/32" +/- 0.015"	1/4" +/- 0.020"	1/4" +/- 0.020"	ASTM D3574
Weight, oz/yd ²	62	68	80	ASTM D3574
Density, lbs/ft ³	30	23	27	ASTM D3574
Commercial Traffic Class	Class III (extra heavy)	Class II (heavy)	Class III (extra heavy)	
Roll Size, yd ²	15	15	15	
Dimensions	4.5' x 30'	4.5' x 30'	4.5' x 30'	
PERFORMANCE				
Compression Resistance				
25%	7.0 psi	3.0 psi	6.0 psi	ASTM D3676
65%	15.0 psi	10.0 psi	12.0 psi	ASTM D3676
Compression Set, Max. %	15	15	15	ASTM D3574
Tensile Strength, Min. psi	>25	>25	>25	ASTM D3574
ACOUSTICAL PROPERTIES				
Impact Insulation Class (IIC)	60	65	63	ASTM E492-77
FLAMMABILITY				
Pill Test	Passes	Passes	Passes	DOC-FF-1-70
Smoke Density Test (NIST)	Passes	Passes	Passes	ASTM E662-97
Radiant Panel Test	N/A – Cushion must be tested in combination with carpet			ASTM E648
PROTECTION				
Antimicrobial Treated	Yes	Yes	Yes	EPA-Registered
Hypoallergenic	Yes	Yes	Yes	
Indoor Air Quality	Certified	Certified	Certified	CRI Green Label Plus Program

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Adhesive Information

Manufacturer	Pressure-Sensitive (Floor Only)	Premium Permanent Adhesive	Seam Sealer	Phone Number
CHAPCO	SS2	SS3, SS575, SS475	31	800-621-0220
DURABOND	D870	D860, DS-902	D-815	800-523-6530
PARACHEM	4277	Magnum Plus Gold (4099)	M4263	800-763-7272
WF TAYLOR	2027	2055	2075	800-397-4583
MAPEI	800	Eco 350	8200	800-704-7986

Installation Method(s)	Minimum Guideline Trowel Size	
Carpet-to-Cushion (smooth back)	1/8" x 1/8" x 1/16" U-Notched	
Carpet-to-Cushion (rough back)	1/8" x 3/16" x 1/8" U-Notched	
Cushion-to-Floor	1/16" x 1/16" x 1/16" Square Notched	

IMPORTANT: THIS INFORMATION IS A GUIDELINE. PLEASE CONSULT ADHESIVE MANUFACTURER FOR SPECIFIC DETAILS.

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Architectural Specifications

PART 1: GENERAL

1.01 DESCRIPTION

- A. - Related work specified elsewhere
 - Carpeting
- B. The extent of installation work is indicated on the drawings for carpeted areas and in schedules.
- C. Type of installation required:
 1. Double-glue-down – an installation whereby the cushion is glued to the floor and the carpet is then glued to the cushion.
 2. Cushion – Leggett & Platt’s DOUBLESET® Series. Check appropriate box:

BV0025 DOUBLESET 62
 BV0026 DOUBLESET 68
 BV0027 DOUBLESET 80

1.02 QUALITY ASSURANCE

- A. Manufacturer:
 - Leggett & Platt, Inc. Flooring Products Division
 - 307 West 7th Street, Suite 1800; Fort Worth, TX 76102
- B. Flammability:
 - Installations may require that the carpet cushion pass the Federal Flammability Standard DOC-FF-1-70 and ASTM E662-97. Carpet cushion subject to such requirements shall be so certified.

1.03 WARRANTY

A copy can be made available upon request to Leggett & Platt, Inc. – Flooring Products Division.

PART 2: PRODUCTS

2.01 MATERIALS

- A. Carpet cushion: Flexible cellular material made from blends of synthetic polymers. A non-woven polyester material shall be applied to the top and bottom of the cushion.

Individual Specifications:

	DOUBLESET 62	DOUBLESET 68	DOUBLESET 80
Density, lbs/ft ³ (+/- 5%)	30.0	23.0	27.0
Thickness, inches (+/- 0.020")	5/32" (0.156)	1/4" (0.25)	1/4" (0.25)
CR @ 65%	15.0 psi	10.0 psi	12.0 psi
CR @ 25%	7.0 psi	3.0 psi	6.0 psi

- B. Adhesive: The adhesive shall be approved by the cushion and carpet manufacturers and follow their joint recommendation of installation.

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Keys to Success

- **Use an approved cushion.**
Use a high-density, dimensionally stable cushion with a proper surface that will allow easy application of adhesive and little adhesive “soak in.”
- **Use an approved carpet.**
Action-back carpets with high pick count backings are dimensionally stable.
- **Use an approved adhesive.**
Use an adhesive that is a soft set with a very high polymer solid product.
- **Use the proper-notched trowel.**
Use a heavy U-Notched trowel, approximately 6-8 sq/yds. per gallon.
- **Allow proper adhesive open time.**
Allow the adhesive to develop “legs” or become tacky.
- **Roll with a lightweight roller.**
Roll the entire job with a lightweight (35 lbs) roller.
- **Restrict traffic.**
Restrict traffic for 24 to 48 hours to allow the adhesive to set up.
- **Proper cleaning procedures.**
Do not over-wet or use solvent cleaner. Do not steam clean for 30 days.

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Technical Bulletin

This product is a high-density, low-profile carpet cushion developed for commercial/contract installations. This product may be used in conventional (e.g., stretch-in over strip) applications even though the product's primary function is for use with the double-glue-down method.

Double-glue-down – simply means an installation whereby the cushion is glued to the floor and the carpet is then glued to the cushion.

The major advantages are the elimination of restretch problems, reduction of seam-peaking, and increased carpet life and appearance retention.

Double-Glue-Down Method

Preparation – It is imperative that the adhesive, carpet, and cushion be stored for 48 hours at room temperature (65 degrees minimum) before installation.

The floors must be dry and free of any substance, which would interfere with good adhesion; holes, loose tiles, or boards should be repaired to make for a smooth surface.

The cushion should be laid out in the longest lengths possible with the seams running perpendicular to the seams in the carpet. If the seams cannot be at right angles to the carpet seams, keep the cushion seams at least 6” from the carpet seams. Cushion edges should be butted together. Any excess along the perimeter walls should be trimmed and tightly fitted.

Gluing the Cushion – Pressure-Sensitive Adhesive or Premium Multipurpose

After all the cushion is in place, fold it back and apply adhesive to the floor.

The adhesive should be applied with a notched trowel according to the adhesive manufacturer's recommendations (see CRI Carpet Installation Standard 104). To ensure sufficient bond of the adhesive, the cushion should be laid into the adhesive while in a “tacky wet” condition. Using a flat object, smooth the cushion into the adhesive, working toward the seams, making sure it is free of buckles and that the seams are tight without overlapping.

Gluing Carpet to Cushion – Premium Multipurpose Adhesive

Trowel the premium multipurpose adhesive designed specifically for double-glue installation over cushion with 1/8” to 3/16” U-notched trowel, depending on the type of carpet backing. For woven, knitted, and unitary backing, apply sufficient adhesive to penetrate all uneven surfaces of backing. Lay carpet into adhesive according to adhesive manufacturer's recommendation for open time so as to allow even distribution and penetration of adhesive on all areas of backing. CAUTION! “Environmentally friendly” adhesives may require more open time. Installing carpet into adhesive prior to sufficient open time may cause the adhesive to migrate up and into the carpet's latex backing and could result in adhesion failure. The use of fans will help reduce setup time and promote tackiness. Roll in both directions, carefully checking to avoid any bubbles prior to full adhesive setup time. Do not use roller in excess of 35 lbs; if unavailable, use the carpet core or similar object.

Traffic should be denied over carpeted area for a minimum of 24 to 48 hours after installation. Failure to do so will create areas where carpet and cushion have been denied proper adhesion.

Exposure to water from cleaning and other sources should be restricted for a minimum of 30 days. Dry-cleaning systems are preferred.

Seaming: Installer may hand-sew, or hot-melt, tape (non-silicone-treated) seams depending on carpet manufacturer recommendations. Hot-melt taping is preferred as a seaming method to avoid potential expansion/contraction of carpet seams.

Note: Certain types of backing such as fusion-bonded are not compatible with many multipurpose adhesives. Refer to your adhesive manufacturer for their recommendation as to the correct adhesive and application. Verification of trowel settings, setup time, and additional questions should be referred to your adhesive manufacturer.

Note: Certain carpet backings, Wilton, Unitary, and some from Axminster – may influence suitability for double-stick. Please consult the carpet manufacturer for instructions and approval.

It is imperative that a premium multipurpose adhesive specifically for double-glue installations and the proper trowel notch be used. Failure to do so could result in adhesive breakdown, crystallization, or premature failure of adhesive between carpet and cushion.