

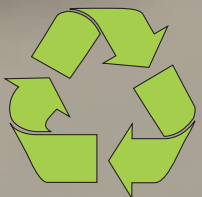
# CARPET CUSHION

The commercial contract carpet cushion to complete your carpet specifications. Forever!



**GREEN  
COMFORT**

**DURA CONTRIBUTES TO LEED**



# DURA

UNDERCUSHIONS LTD.

## ADVANTAGES OF SEPARATE CARPET CUSHION VERSUS DIRECT GLUE-DOWN

- **Avoids high removal cost which normally exceeds installation economy.**
- **Minimizes floor preparation and helps conceal irregularities.**  
Carpet with separate cushion can mask surface irregularities found on most concrete floors and eliminate the need for costly sub-floors and special finishes.
- **Ensures a luxurious feel.**
- **Pile face protected from matting and damage.**
- **Ease of maintenance.**  
Maintenance is more effective, since most vacuum cleaners "lift" the carpet to provide air circulation and therefore ensure maximum cleaning power.
- **Facilitates pattern matching.**
- **Carpet lasts longer.**  
The life of the carpet is improved by as much as 50% if installed over cushion.
- **Lighter-weight carpet can be used.**
- **Acoustical properties are more than doubled.**
- **Adds to "R" value.**
- **Watermarking (puddling).**  
Starts sooner on a direct glue-down application (Dupont Report to the Canadian Carpet Institute).
- **"R" value** : suitable for radiant heated floors.
- **Guaranteed to work over radiant heated floors.**

## INDEPENDENT TEST RESULTS

A 28 oz. level loop nylon, contract carpet which met U.S. industry specifications for heavy/extra heavy traffic area use was subjected to the Phillips Chair Test\*\* in both the glue-down mode and installed over Duracushion.

The loss of pile height (wear) was almost three times greater in the glue-down mode than it was installed over Duracushion. Note the greater recovery during the 24-hour conditioning of the carpet installed over 6 mm Duracushion.

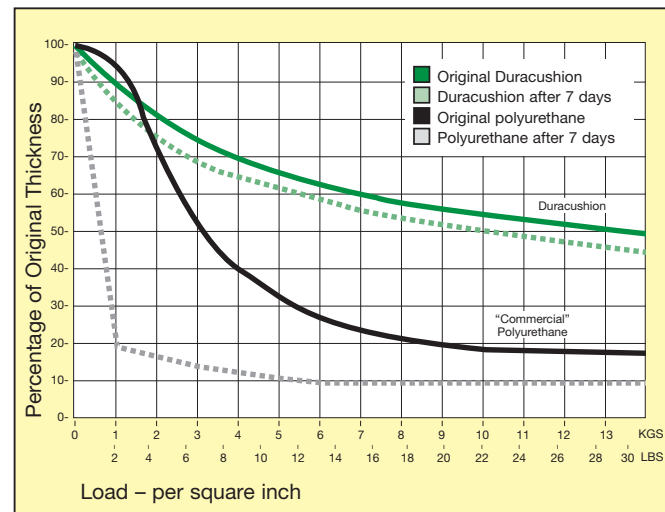
Further testing with the Phillips Chair Test indicates that **a lower pile weight carpet installed over Duracushion should outperform a heavier face weight carpet of similar installed cost direct glue-down.**

\*\*The Phillips Roll Chair Test subjects the installation to the reciprocating action of an office chair impelled at approximately fourteen times per minute with a total weight load of one hundred and fifty pounds.

Pile Height (Inches)	28 oz. Direct glue-down	% Loss	28 oz. on Duracushion	% Loss
Original	.192"	—	.181"	—
After 50,000 revolutions	.143"	25.5	.159"	12.2
After 50,000 revolutions and 24-hour recovery	.145"	24.4	.166"	8.3

## SPECIFY A CARPET CUSHION THAT WILL PERFORM THROUGHOUT THE LIFE OF THE CARPET AND STILL BE PERFORMING

**Permanence and firmness** are two essential features of Dura carpet cushions. Some carpet cushions have an initial firmness (even firmer than Dura) but collapse under heavier loads. They also tend to lose this firmness, dramatically, under extended wear conditions. The graph below demonstrates the relative performances of Duracushion and a "commercial contract" polyurethane product using graft polyol. Both have been subjected to the Tetrapod Walker Test.



## North American Installations

Winners Circle,  
Rockingham Raceway, NH  
Walt Disney Industries,  
Burbank, CA  
Disneyland, Anaheim, CA  
Royal Lahani Hotel, Maui, HI  
Bally's, Las Vegas, NV  
Sahara, Las Vegas, NV  
Mirage, Las Vegas, NV  
Watergarden, Santa Monica, CA  
Norwalk City Hall, CA  
Nugget Hotel, Sparks, NV  
Pioneer Theatre, Reno, NV  
Rainier Square Bldg, Seattle, WA  
Triples Restaurant, Seattle, WA  
Sun Sports, Seattle, WA  
Burlington Airport, VT  
Y.M.C.A., El Paso, TX  
Princess Cruises - Royal Princess  
Sony Picture Studios, L.A., CA  
McDonalds Playhouses  
Drake Hotel, Chicago, IL  
Westin Hotels throughout Canada  
Queen Elizabeth Hotel,  
Montreal, QC

Holiday Inn, Chinatown,  
Montreal, QC  
Bonaventure Hilton,  
Montreal, QC  
Sheraton Centre, Montreal, QC  
Ritz-Carlton Hotel, Montreal, QC  
Houses of Parliament,  
Ottawa, ON  
Bombardier, Montreal, QC  
Skydome, Toronto, ON  
Harbour Castle Hilton,  
Toronto, ON  
North York Schoolboard,  
Toronto, ON  
Sheraton Centre, Toronto, ON  
Royal Alexandra Theatre,  
Toronto, ON  
Banff Springs Club House,  
Banff, AB  
Chateau Lake Louise, AB  
Royal York Hotel, Toronto, ON  
Empress Hotel, Victoria, BC  
Canadian Embassies





## Warranty

Dura underlayments are warranted to retain their essential firmness, resilience and porosity through the useful life of the floor covering under which they are installed.

This warranty applies to all types of indoor installations.

In the event of a confirmed product failure due to defective manufacture the company will replace, without charge, the defective portion of the underlayment with new equivalent product.

This warranty is valid only when the product is used in accordance with our instructions and for its intended purpose and does not cover defects or failures due to inappropriate use or abuse.

“Useful life” is determined in accordance with  
“US-CRI Specifiers Handbook” or its Canadian equivalent.

# DURA REINFORCED

**Application :** The range of reinforced products is recommended for heavy traffic in commercial installations, but is suitable for all areas, including below grade.

**Performance standards :** All reinforced products :

- meet the requirements of CGSB 20GP-23M, CMHC E.R. 03120 Type 1;
- meet compression set recovery of 80% as per ASTM D1055;
- meet the standard of the Hazardous Products Act.

**Other performance properties:** Have excellent tensile strength of 200 N minimum on jute backing and of 90 N minimum on fiberglass/cellulose back (method 9.1\*). The jute back version has a minimum air permeability of 120.4 cm³/cm²/sec, and the fiberglass/cellulose backing version has a minimum air permeability of 13 cm³/cm²/sec (method 36\*) (ASTM D737.67) and a compression set recovery of 80% (ASTM D1055). All the reinforced products pass the methenamine pill test (method 27.6\*).  
\*CAN/CGBS-4.2-M91

**“R” values :** These values represent thermal values at time of installation. Performance over time will relate to the installation retaining its original structure. Dura’s durability ensures that the “R” values, acoustical properties and resilience apply for years to come.

**Compression Force Deflection (CFD):** Combines underfoot comfort with maximum carpet protection. Compresses by 25% under a load of less than 5 lbs. a square inch but retains a protective cushion of at least 35% under a 50 lbs. loading.

## ENVIRONMENTALLY FRIENDLY

- Made with recycled tire rubber (min 80 %) bonded with synthetic latex.
- Passes indoor air quality test for low Volatile Organic Compounds (VOC) emission.
- 100% Recyclable.
- Contributes to LEED credits.

# SPECIFICATIONS

Installation will be by the **Double-Glue System** or **Tackless and Stretch-in Method** (specify choice) and the carpet cushion shall be open cellular rubber reinforced with solid rubber particles, either bonded to jute or fiberglass/cellulose backing, having a minimum thickness of \_\_\_\_\_ weighing approximately \_\_\_\_\_

# ACOUSTICAL PROPERTIES

ASSEMBLY	FSTC (1)	NRC (2)	FIIC (3)
SLAB 225 mm	56		54
Protector 5 mm	57		65
Protector 5 mm + Carpet 35 oz.	58	.50	73
Duracushion 6 mm	57		68
Duracushion 6 mm + Carpet 35 oz.	58	.50	76
Duralux 7 mm	57		70
Duralux 7 mm + Carpet 35 oz.	58	.50	77
Super Dura 10 mm	58		75
Super Dura 10 mm + carpet 35 oz.	59	.50	78

- (1) F.I.I.C. is a measure of impact noise level from one room to another.  
(2) N.R.C. is the measure of the sound absorption in the room.  
(3) F.S.T.C. is a measure of airborne noise level from one room to another.

**Sources:** **N.R.C.** Kodaras Acoustical Laboratories.  
Test method: ASTM C423.  
**F.I.I.C. & F.S.T.C.** Tested and Accredited/Acousti-Lab Ltée.  
Test method: ASTM E366.+ISO 140.

having a density of 22 lbs per cu. ft. It shall conform to CGSB 20-GP-23M Type I. It shall be \_\_\_\_\_ manufactured by Dura Undercushions Ltd., 8525, Delmeade Road, Montreal (Quebec) H4T 1M1. tel. : 514-737-6561, 800-295-4126 fax : 514-342-7940.

†Insert details for particular product from specifications table below.

PRODUCT	Super Dura	Duralux	Duracushion Wide (for area rugs)	Duracushion	Protector	Monoslab I
Backing	Poly	Jute	Jute	Poly	Poly	Jute
Thickness mm (in.)	10 (.4)	7 (.275)	5.6 (.22)	6 (.235)	5 (.2)	5.6 (.22)
“R” value	.88	.58	.52	.52	.46	.52
Mass oz / sq. yd	106	74	60	64	54	60
Roll Weight / lbs	66	70	135 (9’) / 180 (12’)	72	66	66
Density lbs / cu. ft.	22	22	22	22	22	22
Compression Force Deflection lbs / sq. in.	@ 25% min 2 @ 25% max 5 @ 65% min 50	@ 25% min 2 @ 25% max 5 @ 65% min 50	@ 25% min 2 @ 25% max 5 @ 65% min 50	@ 25% min 2 @ 25% max 5 @ 65% min 50	@ 25% min 2 @ 25% max 5 @ 65% min 50	@ 25% min 2 @ 25% max 5 @ 65% min 50
Width in.	54	54	108 / 144	54	54	54
Sq. Yd / roll	10	15	36 (9’) / 48 (12’)	18	20	18
Flammability	CAN/CGSB-4.2 N°27.6-m91					



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# DURA CARPET CUSHIONS AND THE DOUBLE-GLUE CARPET INSTALLATION SYSTEM

Put comfort into direct glue-down carpet installations.

**The system :** High-density flat-profile cushion is glued directly to the floor with seams perpendicular to the direction of the carpet which is then glued to the cushion. This offers stability whilst providing all the advantages of a firm cushion, appearance retention, increased comfort and lower fatigue, better acoustical and “R” values.

**Additional advantages :** Wrinkles, buckles and peaking seams; all the effects of carpet stretching are virtually eliminated. In conjunction with special tapes excellent seams can be achieved, custom motifs and border work are simplified, giving greater freedom of design.

## The Double-Glue System puts comfort into direct glue-down carpet installations.

### DOUBLE-GLUE INSTALLATION PROCEDURE

1. Cushion should be laid rubber-side down in the longest lengths possible.
2. Cushion seams should be at right angles to carpet seams : where this is not possible they should be at least six inches from the carpet seams. It is also advisable to dry lay the carpet at this stage.
3. Using quality multi-purpose adhesive and the appropriate trowel, spread the adhesive uniformly over the floor surface. Follow adhesive manufacturer's instructions.
4. After indicated open time, press the cushion rubber side onto the adhesive. Butt the cushion seams, and effect tight, even seams. Ensure contact with adhesive by exerting light pressure on the cushion with a roller.
5. Trim excess cushion at perimeter of the room.
6. Spread premium multi-purpose adhesive on cushion surface with a trowel (following adhesive manufacturer's directions). After indicated set-up time, position the carpet on the adhesive covered cushion.
7. Carpet should be prepared and installed in accordance with manufacturer's recommendations, particular attention should be given to seams and to rolling the final installation.
8. Allow adhesive to set-up before installation is subjected to traffic.

The double-glue method of installation offers a variety of seaming choices. Carpet can be hand sewn or joined with hot melt tape (only use ROBERTS 50-325 MONOBOND/DOUBLE-BOND HEAT-BOND TAPE). The method to be used is generally decided by the carpet manufacturer, the specifier or the installer. The type of carpet used has a direct bearing on the method chosen. Although adhesive manufacturers recommend specific trowel notches, these may have to be varied where there is rough or porous concrete or in the case of coarse textured carpet backings. A lightweight roller is also called for under these circumstances.

**CAUTION:** Poor quality adhesive, the wrong adhesive, the wrong trowel size or the wrong method of application are the major causes of installation problems. Use the adhesives recommended and

# GET AWAY FROM UPHOLSTERED CONCRETE AND GIVE THE CARPET A SUSPENSION SYSTEM

## Adhesives and cushion

Most adhesive manufacturers now offer adhesives which they consider suitable for the Double-Glue System of application. A high-density low-profile cushion is recommended. All Dura reinforced products have a density in excess of 22 lbs. per cubic foot. Duracushion 6 mm and Protector 5 mm are of a suitable profile and are recommended for double-glue down applications.

## 9. ADHESIVE AND TROWEL

- For installation of cushion to floor only use:

PERMANENT ADHESIVE	{	ROBERTS 3095 with 1/8" x 1/8" x 1/8"
		V-notch trowel.
		or
		MAPEI ECO 185 with 1/8" x 1/8" x 1/8"
		V-notch trowel.
		or
		MAPEI ECO 220 with 1/8" x 1/8" x 1/8"
		V-notch trowel.

- For installation of action back carpet to cushion only use:

ROBERTS MAX 3300 with 1/8" x 1/8" x 1/8"  
U-notch trowel.  
or  
MAPEI ULTRA/BOND ECO 350 with 1/8" x 1/8" x 1/8"  
V-notch trowel. (7 years limited warranty)  
or  
MAPEI ECO 220 with 1/8" x 1/8" x 1/8"  
V-notch trowel. (5 years limited warranty)  
or  
MAPEI ECO 185 with 1/8" x 1/8" x 1/8"  
V-notch trowel. (3 years limited warranty)

- For installation of unitary back carpet to cushion only use:

ROBERTS MAX 3300 with 1/8" x 1/8" x 1/16"  
U-notch trowel.  
or  
MAPEI ULTRA/BOND ECO 350 with 1/8" x 1/8" x 1/8"  
V-notch trowel.  
or  
MAPEI ECO 220 with 1/8" x 1/8" x 1/16" U-notch trowel.  
or  
MAPEI ECO 185 with 1/8" x 1/8" x 1/8" V-notch trowel.

**N.B. Any other adhesive must be approved by the carpet manufacturer in writing.**

contact the adhesive manufacturer if you have any questions concerning the adhesive, the method of application or the trowel size.

# DURA

UNDERCUSHIONS LTD.



# DURA

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## Distributors

### HEAD OFFICE

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CARPET CUSHION COUNCIL



INSTITUTE OF CANADIAN  
UNDERCUSHION MANUFACTURERS



MANUFACTURED IN CANADA

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