

# DESIGN AND CONSTRUCTION GUIDELINES AND STANDARDS

DIVISION 9 • FINISHES

## 09 68 00 • CARPET

### SECTION INCLUDES

Broadloom Carpet  
Carpet Tile

### RELATED SECTIONS

03 30 00 Concrete  
06 10 00 Rough Carpentry

### TESTING, DESIGN & INSTALLATION STANDARDS

**CRI-** Carpet & Rug Institute [www.carpet-rug.org](http://www.carpet-rug.org)

**ASTM Test Method F 1869-** vapor transmittance of concrete slab

**ASTM Standard Practice F710-** alkalinity of concrete slab

**ASTM Test Method D 5116-** VOC content in carpets

**ADA-** Americans with Disabilities Act Federal Accessibility Guidelines

**MAAB-** Massachusetts 521CMR Architectural Access Board Regulations

### DESIGN

Carpet is discouraged in dwelling units. Alternative materials which require less maintenance and do not absorb dirt, spills and odors are preferred. Discuss the needs of the local housing authority and try and find alternative, more durable flooring products which satisfy those needs.

If carpet is to be used in common spaces, do not specify broadloom carpet for public corridors, communal entry vestibules dining areas, laundry rooms, or other high traffic areas. Instead, use 50 cm x 50 cm or 24" x 24" carpet tile with integral backer.

Removable floor mats are preferred at entries

Typically, carpet should not be installed over existing vinyl, VAT or rubber flooring, except VCT, where VCT finish is stripped and cleaned prior to carpet installation. In some cases where the VAT is in good condition and it is not economically feasible to remove the tile, VAT may be covered by the new carpet installation.

Provide ADA/MAAB compliant transitions strips, in extruded aluminum or vinyl.

Confirm finish floor level prior to specifying and require Contractor do the same prior to ordering materials for proper clearance at in-swing doors.

When carpet is used at special needs, barrier free, and adaptable units, provide direct glue-down carpet with a high-density pad for easier wheelchair maneuvering. All edges should be continuously adhered. The carpet backing and adhesive should be waterproof.



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### BROADLOOM CARPET & CARPET TILE

Specify straight wall base for ease of maintenance and future carpet replacement.

Specify the seams, edge moldings, carpet direction and accessories.

Where carpet tile is used, specify a requirement for 5-10% attic stock for delivery to housing authority at substantial completion as part of the contract.

#### MATERIAL

Select a specific carpet by manufacturer and series and specify it with at least two approved equals. Review carpet submittals and do not accept substitutes that do not meet the specification.

Carpet should meet the following criteria:

- Short (1/8 to 3/16 inch), closed loop pile with an anti-ravel feature, and a minimum 11 pound tuft bind.
- Warranties should be minimum 10 year:
  - for stain resistance and colorfastness
  - for pad de-lamination warranty for carpet tile.
  - against edge-ravel, zippering or de-lamination for both carpet tile and roll carpet.
  - for antimicrobial treatment
- Solution-dyed nylon, 26+ ounce face weight, high density, level loop.
- Class 1-flammability rating and a maximum specific optical density of 450 or less during smoke generation.
- Permanent anti-microbial treatment

Select carpet colors with relatively high light reflectance, especially for interior spaces with low light levels.

Select multi-colored patterns which are varied and multi-directional to help hide dirt and stains. Integrate patterns and borders to provide visual cues and interest, when carpet tile is used.

Specify manufacturers who have established recycling programs in place.

#### EXECUTION

Acclimate and install the carpet in temperatures between 55 and 95 degrees Fahrenheit; unroll the carpet and allow carpet to relax for 24 hours minimum before installation. Maintain temperatures during curing and do not permit traffic for 48 hours on adhered carpet.

Inspect concrete and pre-cast plank floors and specify a leveling compound if required. For slabs-on-grade construction, test concrete floor for moisture vapor and alkalinity per ASTM standards. High moisture content may require special primers and adhesives. Consider alternatives to carpet in these



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locations. Carpet is not recommended for slab on grade or below grade concrete floors.

Re-install fasteners and/or install additional screws if required to properly to secure floor sheathing and sub-floor.

Require seaming diagrams for a shop submittals from the installer before broadloom carpet work begins. Minimize seams in carpet and pad.

Avoid running broadloom carpet seams perpendicular to doorways, at pivot points or across the path of travel in corridors.

Align the carpet seams perpendicular to the pad seams or offset at least 6" between the two.

Do not carpet over expansion joints.

If an underlayment is necessary, specify either an FSC ¼" AC plywood or a recycled content gypsum based underlayment similar to that used for tile.

Broadloom carpet installed with a pad should be power stretched.

Adhered carpet should be rolled in both directions, using manufacturer's prescribed roller weight.

Provide housing authority with manufacturers' instruction sheet on proper maintenance, including recommended cleaning methods.

### CARPET ADHESIVES



- Low VOC adhesives, (less than 10 mg/sq. meter/hr.), per ASTM D5116.
- Less than 3.00 mg/sq. meter/hr. 2-ethyl-1 hexanol
- Less than .05 mg/sq. meter/hr. formaldehyde
- Consider using tackless strips instead of adhesives

### CARPET PAD



- At least 25% recycled pad content.
- Total pad VOC's less than .5 mg/sq. meter/ hr.
- Total pad BHT (butylated hydroxytoluene) less than .30 mg/sq. meter/hr.
- Total pad formaldehyde or phenylcyclohexene less than .05 mg/sq. meter/hr.
- Class II fiber or rubber pad- polyurethane foam pads are not acceptable
- Pad should not contain brominate fire retardants
- High density pads should be used under broadloom carpets.

### INDOOR AIR QUALITY CONSIDERATIONS

When replacing old carpet, vacuum old carpet prior to removal and vacuum subfloor immediately after the old carpet and cushion have been removed.

When installing new carpet, provide fresh air ventilation for 48 hours minimum after the installation of carpet and adhesives.

Do not use heating with air recirculation during carpet installation.

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Use low-VOC adhesives.

### RECYCLING



Specify recycling for waste carpet, and for carpeting being removed when recycling is available. Research this prior to specifying carpet. Use manufacturers and products which have high recycled content and manufacturer's recycling programs in place.

Specify carpet pads with at least 25% recycled content.