Product	
Supplier	Flooring2
Product Type	Broadloom Carpet
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Broadloom Carpet Installation Guide

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Legal Disclaimers

> **IMPORTANT: READ BEFORE INSTALLATION**

Limitation of Liability
This guide provides general installation information only. We are not responsible for installation errors, product damage, personal injury, or property damage resulting from the use of this guide. Actual results depend on site conditions, installer skill, and adherence to all applicable codes and standards.

General Information Notice
This guide covers general installation methods for broadloom (wall-to-wall) carpet. Product specifications may vary between product lines.

Professional Consultation Recommended
Broadloom carpet installation requires specialized skills and tools. We recommend professional installation for most applications, especially for stairs, large areas, and pattern-matched carpet.

Assumption of Risk
By proceeding with installation, you assume all risks associated with carpet installation, including but not limited to physical injury, property damage, and voiding of product warranties due to improper installation.

Safety Warnings

Regulatory Compliance

Before beginning any carpet installation, ensure compliance with:

- **OSHA Standards** - Follow workplace safety requirements (29 CFR 1926 for construction)
- **EPA Regulations** - Proper handling and disposal of old carpet and padding
- **Building Codes** - Comply with International Building Code (IBC) and International Residential Code (IRC)
- **Lead Safety** - For structures built before 1978, follow EPA RRP Rule requirements
- **Asbestos Requirements** - For structures built before 1981, have existing flooring and adhesives tested before removal

Personal Protective Equipment (PPE)

Equipment	When Required
Respiratory Protection	N95 mask when removing old carpet or working in dusty conditions
Eye Protection	Safety glasses when cutting, using power stretcher, or working with adhesives
Hand Protection	Cut-resistant gloves when handling carpet knives and tack strip
Knee Protection	Professional knee pads for extended floor-level work
Back Support	Lifting belt when moving heavy carpet rolls

Health Hazards

> **Chemical Exposure:**
>
> • New carpet may emit VOCs (volatile organic compounds)
> • Work in well-ventilated areas
> • Allow carpet to air out before installation if possible
> • Review Safety Data Sheets (SDS) for adhesives and seam sealers
>
> **Dust and Allergens:**
>
> • Old carpet removal releases dust, dirt, and allergens
> • Use appropriate respiratory protection
> • Seal off HVAC vents during removal
> • Clean thoroughly before and after installation
>
> **Physical Strain:**
>
> • Carpet rolls are heavy (50-100+ lbs)
> • Use proper lifting techniques
> • Power stretching requires significant force
> • Take regular breaks to prevent fatigue
>
> **Sharp Tools and Materials:**
>
> • Carpet knives are extremely sharp
> • Tack strip contains sharp pins
> • Cut toward yourself, never toward others
> • Keep blades sharp to reduce required pressure

Emergency Procedures

Situation	Action
Cuts from Knife/Tack Strip	Apply pressure, clean wound, bandage or seek medical attention for deep cuts
Adhesive Contact (Skin)	Wash immediately with soap and water
Adhesive Contact (Eyes)	Flush with clean water for 15 minutes, seek medical attention
Back/Knee Injury	Stop work, apply ice, seek medical attention if severe

Emergency Contacts:

• Poison Control: 1-800-222-1222
• Local emergency services: 911

Pre-Installation Preparation

Tools and Materials Needed

Specialized Carpet Tools:

• □ Power stretcher with extensions (essential for professional results)
• □ Knee kicker
• □ Carpet knife with carpet blades
• □ Seam roller
• □ Seam iron (for hot-melt seaming tape)
• □ Wall trimmer (adjustable)
• □ Stair tool
• □ Awl or ice pick
• □ Row finder/separator

Basic Tools:

• □ Tape measure (minimum 25 ft / 7.6 m)
• □ Chalk line
• □ Straight edge
• □ Utility knife
• □ Hammer
• □ Tin snips (for cutting tack strip)

- □ Pry bar
- □ Staple gun

Materials:

- □ Broadloom carpet (measure + 10% for waste and matching)
- □ Carpet pad/cushion (appropriate weight for application)
- □ Tack strip (wood or concrete type as needed)
- □ Seaming tape (hot-melt required)
- □ Seam sealer
- □ Carpet staples (for pad)
- □ Masonry nails (for concrete subfloors)
- □ Transition strips

Safety Equipment:

- □ Safety glasses
- □ Cut-resistant gloves
- □ Knee pads
- □ Dust mask
- □ Back support (for heavy lifting)

Room Preparation

1. **Remove all furniture** - Clear the entire room
2. **Remove existing floor covering** - Dispose of old carpet and pad properly
3. **Remove doors** - If they swing into the room
4. **Remove baseboards** - Label for reinstallation (optional, depending on method)
5. **Inspect and repair subfloor** - Fix any squeaks, loose boards, or damage
6. **Undercut door casings** - Allow carpet to tuck underneath (typically 1/2" / 13mm)
7. **Clean the subfloor** - Remove all debris, nails, staples, and old adhesive

Subfloor Requirements

Acceptable Subfloor Types:

- Plywood (minimum 1/4" / 6mm exterior grade over solid base)
- OSB (minimum 5/8" / 16mm)
- Particleboard (in good condition, fully secured)
- Concrete (fully cured, dry, and clean)
- Existing hard-surface flooring (if well-bonded and smooth)

Preparation Standards:

- Floor must be flat within 3/16" over 10 feet (4.7mm over 3m)
- Fill low spots with appropriate patching compound
- Sand or grind down high spots
- Remove all protruding fasteners
- Repair squeaky floors before installation

Moisture Testing Requirements:

Subfloor Type	Test Method	Maximum Reading
Concrete	Calcium Chloride (CaCl)	3-5 lbs per 1,000 sq ft / 24 hrs
Concrete	Relative Humidity (RH)	75% RH
Wood	Pin-type moisture meter	12% moisture content

Climate Requirements

Required Conditions:

- Temperature: 65F - 85F (18C - 29C)
- Relative Humidity: 35% - 65% RH
- HVAC should be operational for at least 48 hours before installation
- Maintain conditions during and after installation

Carpet Acclimation:

- Unroll and lay flat for 24-48 hours in installation area

- Allow carpet to relax and adjust to room conditions
- This helps prevent post-installation wrinkles

Installation Methods

Method 1: Stretch-In (Tackless) Installation

Best For: Most residential and many commercial applications

Requirements:

- Tack strip installed around room perimeter
- Carpet pad/cushion underneath
- Power stretcher for proper tensioning

Step-by-Step Instructions

Step 1: Install Tack Strip

- Nail tack strip around entire room perimeter
- Position strip 1/4" to 3/8" (6-10mm) from wall (gap equals 2/3 carpet thickness)
- Pins should angle toward the wall
- Cut strips to fit around corners and obstacles
- Do not install across doorways (use transition strips instead)
- For concrete, use concrete nails or adhesive

Step 2: Install Carpet Pad

- Roll out pad with waffle/textured side up (toward carpet)
- Butt seams tightly (do not overlap)
- Tape seams with pad tape
- Staple every 6" (15cm) along edges and seams
- Cut pad to fit against tack strip (not over it)
- For concrete, use glue or double-sided tape

Step 3: Cut and Position Carpet

- Measure room and add 3-4" (7.5-10cm) to each wall
- Cut carpet with pile facing the same direction throughout
- Position carpet with excess running up walls
- Check pile direction for uniformity

Step 4: Seam Carpet (if required)

- Plan seams in low-traffic areas, away from doorways
- Run seams parallel to main light source
- Cut seam edges straight using row finder
- Apply seam sealer to cut edges
- Install hot-melt seaming tape centered under seam
- Heat tape and press carpet into adhesive with seam roller
- Allow seam to cool before stretching (30 minutes minimum)

Step 5: Stretch and Hook Carpet

- Start in a corner and hook carpet onto tack strip
- Use power stretcher across the room (never just kick)
- Stretch from center toward walls
- Work in sequence: stretch one wall, then opposite wall
- Use knee kicker for final adjustments near walls
- Stretch produces 1-2% carpet elongation

Step 6: Trim and Tuck

- Trim excess carpet with wall trimmer
- Leave enough to tuck into gutter (gap between tack strip and wall)
- Tuck carpet down using stair tool
- Trim around obstacles, vents, and transitions
- Install transition strips at doorways

Method 2: Glue-Down Installation

Best For: Commercial applications, high-traffic areas, and areas requiring maximum stability

Requirements:

- Approved adhesive (see below)
- Clean, porous subfloor
- Professional application recommended

Adhesive Requirements

REQUIRED PRODUCTS - NO SUBSTITUTIONS

Product	Specification
Adhesive	MAPEI ECO 185 or Parabond 4099
Primer	Appropriate MAPEI primer for subfloor type (if required)
Application	Troweled only (rolling NOT permitted)

Application Method:

1. **Apply primer first** (if required) - Allow to dry completely
2. **Trowel adhesive** - Use recommended notch trowel size
3. **Do NOT roll adhesive** - Troweling is required
4. **Follow open time guidelines** - Per adhesive technical data sheets

Step-by-Step Instructions

Step 1: Prepare Subfloor

- Floor must be completely clean and smooth
- Apply primer if required
- Allow primer to dry completely

Step 2: Plan Layout

- Snap chalk lines to guide carpet placement
- Determine seam locations
- Plan for pattern matching if applicable

Step 3: Apply Adhesive

- Use recommended notched trowel size
- Spread adhesive in sections, working away from exit
- Allow adhesive to become tacky (per open time guidelines)
- Do not apply more than you can cover in the working time

Step 4: Install Carpet

- Roll carpet into adhesive carefully
- Press firmly to ensure contact
- Use roller (75-100 lb) to embed carpet
- Work out air bubbles toward edges

Step 5: Seam Carpet

- Butt edges tightly together
- Apply seam adhesive per product instructions
- Roll seams with seam roller
- Clean any adhesive from carpet surface immediately

Step 6: Trim and Finish

- Trim edges at walls
- Install base molding or wall base
- Keep traffic off carpet until adhesive cures (typically 24-48 hours)

Finishing Touches

Transitions and Thresholds

Transition Type	Use Case
Metal carpet bar	Doorways between carpet and hard surfaces
Gripper edge	Carpet to tile/wood transitions
Z-bar	Carpet ending at raised surface
Seam binder	Joining carpet in doorways
Reducer	Carpet to lower flooring

Installation Notes

- Install transitions at the center of doorways
- Secure transitions to subfloor, not carpet
- Allow carpet to tuck under or grip transition edge
- Match metal finish to room hardware when possible

Final Steps

1. **Vacuum thoroughly** - Remove installation debris and loose fibers
2. **Inspect all seams** - Check for gaps, overlaps, or visible tape
3. **Check stretch** - Floor should be smooth with no ripples or bubbles
4. **Reinstall baseboards** - Leave 1/8" gap above carpet surface
5. **Rehang doors** - Adjust clearance if needed (typically 1/2" above carpet)
6. **Replace furniture** - Use carpet protectors under heavy furniture

Traffic Restrictions

- **Light foot traffic:** Immediately for stretch-in, 24 hours for glue-down
- **Heavy furniture:** 24 hours for stretch-in, 48 hours for glue-down
- **Rolling furniture/chairs:** 48-72 hours

Room-Specific Considerations

High-Traffic Areas

- Use denser, commercial-grade carpet
- Consider loop pile for durability
- Ensure proper stretching to prevent ripples
- Plan for more frequent maintenance

Stairs

> **Warning:** Stair carpet installation requires specialized skills. Consider professional installation.

Key Requirements:

- Measure each tread and riser carefully
- Install tack strip at back of tread and bottom of riser
- Carpet must be secured at every step
- Use stair tool to tuck carpet into corners
- Waterfall or cap-and-band installation methods available
- Consider pre-made stair treads for uniform results

Basements

- Conduct thorough moisture testing
- Use moisture barrier under pad if any moisture risk
- Consider synthetic backing (not jute)
- Use closed-cell foam or rubber pad for moisture resistance
- Ensure proper ventilation to prevent mold

Bathrooms

> **Note:** Carpet is generally not recommended for bathrooms due to moisture exposure.

If installed:

- Use synthetic carpet with waterproof backing
- Ensure excellent ventilation
- Seal edges around fixtures
- Plan for frequent replacement

Radiant Heat Systems

Pre-Installation Requirements:

- Verify carpet and pad R-value meets requirements (combined R-value typically <2.5)
- System must be operational 2 weeks before installation
- Reduce temperature to 65F (18C) 5 days before installation
- Use pad designed for radiant heat

Post-Installation:

- Gradually increase temperature (5F / 2.8C per day)
- Maximum floor surface temperature: 85F (29C)
- Monitor for any buckling or delamination

Quality Control Checklist

Pre-Installation

- □ Subfloor inspected and repaired
- □ Subfloor clean and dry
- □ Moisture testing completed (especially concrete)
- □ Room temperature and humidity within specifications
- □ Carpet acclimated to room conditions
- □ All materials on-site and inspected for defects
- □ Tack strip layout planned

During Installation

- □ Tack strip properly spaced from walls
- □ Pad seams tight and secured
- □ Carpet seams properly sealed
- □ Power stretcher used (not just knee kicker)
- □ Stretch applied in correct sequence
- □ No bumps, ripples, or loose areas
- □ Pattern aligned correctly (if applicable)

Final Inspection

- □ Floor is smooth and fully stretched
- □ All seams tight and invisible
- □ Edges properly tucked
- □ Transitions securely installed
- □ No visible tack strip or pad
- □ Carpet pile direction uniform
- □ Doors operate correctly
- □ Area thoroughly vacuumed

Troubleshooting

Ripples or Bubbles

Cause: Insufficient stretching, pad bunching, or humidity changes

Solution:

- Re-stretch carpet using power stretcher
- Check and reposition pad if bunched
- May need to release and re-stretch entire room

Prevention:

- Always use power stretcher, not just knee kicker
- Stretch in proper sequence
- Allow carpet to acclimate before installation

Visible Seams

Cause: Poor seam technique, wrong seaming method, or pattern mismatch

Solution:

- Re-seam with proper technique
- Ensure edges are properly sealed
- Check pile direction matches across seam

Prevention:

- Use row finder to cut straight edges
- Apply seam sealer before joining
- Match pile direction and pattern

Fraying Edges

Cause: Improper cutting or missing edge sealer

Solution:

- Apply seam sealer to frayed edges
- Trim loose fibers carefully
- Re-tuck if necessary

Prevention:

- Use sharp blades for all cuts
- Apply seam sealer to all cut edges immediately
- Handle edges carefully during installation

Carpet Shedding

Cause: Normal for new carpet, especially cut pile styles

Solution:

- Vacuum regularly (loose fibers are normal for 6-12 months)
- Do not pull loose fibers (cut them if bothersome)

Prevention:

- Inform customer this is normal for new carpet
- Not a defect unless excessive

Odor from New Carpet

Cause: Normal off-gassing of VOCs from new materials

Solution:

- Increase ventilation
- Allow 48-72 hours for odor to dissipate
- Run HVAC fan continuously

Prevention:

- Unroll and air out carpet before installation

- Maintain good ventilation during installation

Professional vs DIY

DIY May Be Suitable For

- Small, simple rectangular rooms
- Rooms without seams needed
- Installers with previous experience
- When proper power stretcher is available
- Not on stairs

Professional Installation Required For

- Rooms requiring seams
- Stairs
- Large areas (500+ sq ft)
- Pattern-matched carpet
- Commercial installations
- Glue-down installations
- Rooms with complex shapes
- Basement or high-moisture areas
- When warranty requires professional installation

Care and Maintenance

Daily/Regular Care

- Vacuum high-traffic areas frequently (3-4 times per week)
- Vacuum entire carpet weekly at minimum
- Set the brush to the pile: loop, berber, cut-and-loop, long pile, frieze, and shag take suction only, with the rotating brush turned off; cut pile takes a soft brush at a raised height setting
- Wool and wool-blend carpet: follow the Wool and Wool-Blend Carpet section of the Care & Maintenance Guide
- Remove shoes at entry points to reduce soil tracking

Spot Cleaning

1. Blot spills immediately (do not rub)
2. Work from outside of stain toward center
3. Use approved carpet cleaning solution
4. Rinse with clean water
5. Blot dry with clean towels
6. Allow to dry completely

Professional Cleaning

- Deep clean every 12-18 months (or per warranty requirements)
- Use hot water extraction (steam cleaning) method
- Hire CRI-certified cleaning professionals
- Allow carpet to dry completely before replacing furniture

Products to Avoid

- Bleach or bleach-containing cleaners
- Harsh chemical cleaners
- Excessive water (over-wetting)
- DIY shampoo machines (often leave residue)
- Stiff brushes that can damage fibers

Ongoing Maintenance

- Place walk-off mats at entries
- Rearrange furniture periodically to even wear
- Use furniture cups under heavy pieces
- Trim snags with scissors (never pull)
- Address damage promptly to prevent spreading

Additional Resources

Industry Associations

- Carpet and Rug Institute (CRI)
- World Floor Covering Association (WFCA)
- International Certified Floorcovering Installers Association (CFI)

Certification Programs

- CFI Certified Flooring Installers
- INSTALL Flooring Certification
- CRI Seal of Approval Products

Warranty Information

See separate warranty brochure for complete warranty terms and conditions.

This installation guide is provided for general reference. Always consult local building codes before installation.