

Commercial Acoustics Floor Blokker Specification

Division 09 – Finishes

Section 09500 – Acoustical Treatment

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes:

1. Floor Blokker by Commercial Acoustics resilient flooring underlayment.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including supplements and addendums.
- B. Applicable Specification Sections: Division 01 – General and Division 09 – Finishes.

1.3 REFERENCES

A. International Building Code (IBC) 2012:

1. Section 1207 – *Sound Transmission*

B. ASTM Tests:

1. E492 – *Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine.*
2. E989 – *Standard Classification for Determination of Impact Insulation Class (IIC).*
3. E2179 – *Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors.*
4. E90 – *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.*
5. E413 – *Classification for Rating Sound Insulation.*

1.4 SUBMITTALS

A. For each product indicated:

1. Product Data Sheet: manufacturer's specifications including laboratory test summary.
2. Installation Instructions: detailed installation procedure including jobsite condition requirements, surface preparation requirements, and approved products.

1.5 DELIVERY, STORAGE, AND HANDLING

A. All materials shall be delivered in original unopened packaging.

B. Materials to be stored in a dry environment at temperatures ranging from 0-110 degrees (F)

1. Materials should be allowed to acclimate to environment prior to installation in 60 degrees (F) or greater for 24 hours or more to reduce material stiffness when unrolling.
2. If material stiffens, it may be softened more rapidly using a heat gun.

1.6 PROJECT CONDITIONS

A. Installation of underlayment product to occur after the space is 100% dried in (all windows and doors installed), preferably after drywall installation.

B. Finished floor to be installed within two (2) weeks after Floor Blokker installation, if possible.

1. Underlayment shall be protected from heavy wear, including the use of stilts, hand trucks, and other heavy equipment.

PART 2 – PRODUCTS

2.1 FLOOR BLOKKER BY COMMERCIAL ACOUSTICS

A. Materials:

1. Engineered sound-damping underlayment, designed to remediate both impact and airborne noise.
2. Ethylene Vinyl Acetate (EVA) & Polyethylene (PE) product made from post-industrial recycled material.

B. Dimensions:

1. Thickness Uncompressed: 1/4" (6mm)
2. Thickness Compressed: 3/16"
3. Weight: 0.75 lb/sq.ft.
4. Standard Sizes: 4'x25' rolls; 4'x8' sheets; custom length rolls available.
5. Tolerances:
 - a. Width: +/- 0.5"
 - b. Length: +/- 1%
 - c. Nominal Thickness: +/- 0.10"

C. Performance:

1. Delta-IIC = 26 (ASTM E2179).
2. Minimum STC = 25 (ASTM E90)
3. UL Classified Assemblies:
 - a. 300, 400, 500 Series
4. Flammability Rating:
 - a. Class 1 (ASTM E84 Rev. A)
 - b. 1-Hour fire resistance wall rating (ASTM E119)
 - c. 0.3 Thermal Resistance coefficient (ASTM C518)
5. Environmental:
 - a. Mold/Mildew resistant. No fungal/algae growth and no visible disfigurement (ASTM D3273 & ASTM G21).
 - b. 100% recyclable at end of life.
 - c. Non-PVC: no off-gassing.
 - d. HIPPA Compliant.
 - e. Impermeable air and moisture barrier.

PART 3 – EXECUTION

3.1 PREPARATION

- A. Concrete Subfloor: Standard density concrete must of good quality with low water-to-cement ratio consistent with the requirements for placement of finishes. It shall have a max. slump of 4" and min. compressive strength of 3500 psi. Concrete shall be clean, dry, smooth, structurally sound, and free of foreign materials that may prevent an adhesion bond (ASTM F710).
 1. Moisture testing to be performed in accordance with ASTM F2170 or in accordance with ASTM F1869.
 - a. Concrete must be dry with emission rates that do not exceed 3lb/1000sq.ft. in 24 hours.
 - b. Concrete surface must have pH of 9 or less.

- c. Bond testing to determine compatibility of adhesives to concrete must be provided by Adhesive Manufacturer.
- B. Gypsum Concrete Subfloor: Gypcrete surfaces to receive Floor Blokker must be clean and cured per the gypsum concrete manufacturer's curing instructions.
- C. Wood Subfloor: Wood surfaces (or cement board) to receive Floor Blokker must be broom clean and smooth with no protruding fasteners.
 - 1. Protrusions greater than 1/16" shall be scraped from the surface to avoid puncturing.

3.2 INSTALLATION

- A. Place EVA (Black) side UP onto the subfloor for the following finishes:
 - 1. Hardwood or Engineered Wood – nail-down, glue-down.
 - 2. Carpet Tiles – glue-down.
 - 3. LVT, VCT, Laminates, and others.
- B. Place EVA (Black) side DOWN onto the subfloor for the following finishes:
 - 1. Ceramic Tile.
 - 2. Floating Floors
- C. **NOTE**: Floor Blokker is not designed for use under Ceramic Tile or LVT less than 5mm in thickness.

3.3 PROCEDURE

- A. Acoustic sealant shall be used at base of bottom plate of walls where necessary, prior to installation of Floor Blokker.
- B. Start in corner of the room. Unroll Floor Blokker flush with existing walls.
- C. Cut to required length using utility knife and straight-edge.
 - 1. Cut around irregular objects and columns.
- D. Roll out additional rolls, tightly butting side edges to one another.
 - 1. Do NOT overlap seams.
 - 2. Butt-joints shall not have openings exceeding 1/16".
 - 3. End-joints shall be staggered.
- E. Seams should be taped with an approved impermeable tape.
 - 1. Tape should be rolled out to ensure no bubbles or wrinkles.
 - 2. Tape not required for hardwood or laminate with wood sub-floor applications.
 - 3. See Detailed Installation Instructions for list of approved impermeable tapes.
- F. Adhesives:
 - 1. See Detailed Installation Instructions or contact product Manufacturer for list of approved adhesives, glues, mortars, and grouts.
 - 2. Floor Blokker is adhered to the subfloor using premium, polyurethane-based, vinyl tile adhesive.
 - 3. Do NOT use water-based Latex Adhesives.
- G. Hardwood Floor Installation:
 - 1. Follow floor covering Manufacturer's recommended installation instructions.
 - 2. Planks should be installed perpendicular to Floor Blokker underlayment pattern.
 - 3. Ensure seams of wood flooring are offset from Floor Blokker underlayment seams.
 - 4. Hardwood should not contact drywall or baseboard directly. Use acoustic sealant where locked under baseboard.
- H. Ceramic Tile Installation:
 - 1. Glue Floor Blokker to subfloor using approved adhesive.

2. Install mortar and tiles to white side (facing up) of Floor Blokker, per tile and adhesive Manufacturers' instructions.
3. Mortar joints should be no greater than 1/8".
- I. See Floor Blokker Detailed Installation Instructions for additional guidelines, finish options, recommendations, and approved products.

CONTACT WITH QUESTIONS:

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