### DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Housing - Federal Housing Commissioner

TO: DIRECTORS, SINGLE FAMILY HOCS DIRECTORS, MULTIFAMILY HUBS

Series and Series Number: MATERIALS RELEASE NO: 1312f (Supersedes issue dated September 30, 2022)

ISSUE DATE

March 20, 2024

**REVIEW DATE** 

March 20, 2027

SUBJECT: 1. Product Carpet Made from Minimum 3.0 Denier Continuous Heat Set Plied Nylon or

Polyethylene Terephthalate (Polyester – PET) Yarn

2. Name and address of Manufacturer

Shaw Industries, Inc. 616 East Walnut Avenue

P.O. Drawer 2128 Dalton, GA 30722-2128

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: Indoor, moderate, and heavy traffic in single and multifamily housing, and Multi-Family Elderly and Care – Type Housing.

#### **DESCRIPTION:**

This broadloom or modular carpet is made from continuous filament heat set plied nylon or continuous filament Polyethylene Terephthalate (PET) yarn with a minimum size of 3.0 denier per filament.

#### PRODUCT USE CLASSIFICATION TYPES FOR CARPET APPLICATIONS

# Type I – Single and Multi-family Dwelling Units

<u>Class 1</u> - For general to moderate traffic use in single family dwellings and living units of multi-family dwellings.

<u>Class 2</u> – For heavy traffic use in single family dwellings and living units of multi-family dwellings.

# Type II – Multi Family Housing-Elderly and Care-Type Housing

<u>Class 1</u>-\*For moderate traffic end use applications in public areas such as multi–family housing, assisted living facilities and all areas of Care-Type housing, including private offices, sleeping rooms and some administrative areas.

<u>Class 2</u> –\*For heavy traffic end use applications at all levels but specifically for public areas such as lobbies, corridors of multi – family housing, assisted living facilities and all areas of Care-Type housing, open offices, entrance ways and areas where large numbers of people congregate.

\*Note: Carpets in Type II Class 1 & 2 may be subject to provisions of state or local codes and provisions of the Americans with Disabilities Act.

<b>Product Construction Types</b>	Description
A. Level, Multilevel or Textured Loop	Pile made from level uncut pile or two or more levels of
	uncut pile yarns
B. Cut Pile, Level, Multilevel, or Cut and	Pile made from cut, cut and loop, single level or multi-level
Loop	pile yarns

### **REQUIREMENTS:**

- 1. All products shall be tested in accordance with Table 1.0 at a frequency defined in the Certification and Labeling section of this document.
- 2. Colorfastness Tests shall be conducted on 100% of the colors during the initial testing and certification process. Thereafter, only the material from the Annual and Interim Test will be tested for colorfastness.
- 3. Minimum pile weights and pile yarn densities for each combination of Product Classification Type, Fiber Type, and Carpet Construction Type are shown in Tables 2.0A and 2.0B. The values for pile weights are expressed as minimums and are acceptable at ± 7% tolerance for pile weight as long as values do not go below the minimum pile weight.

### METHODS/DEFINITIONS

- 1. Average Pile Thickness (t): The average pile thickness of Level and Textured Loop Pile carpet shall be computed in inches in accordance with ASTM D6859 Standard Test Method for Pile Thickness of Level Pile Yarn Floor Covering, and for multi-level loop pile construction the average pile thickness shall be computed in accordance with ASTM D7241 Standard Test Method for Pile Thickness of Finished Multi-level Pile Yarn Floor Covering for Product Construction Type A. Level, Multilevel or Textured Loops.\*
- 2. Average Tuft Height (T) The average tuft height above the backing as determined by ASTM D5823 Standard Test Method for Tuft Height for Pile Floor Coverings for Product Construction Type B- Cut Pile Level, Multilevel, or Cut and Loop.
- 3. Average Pile Density (D) The average pile density shall be weight per unit volume in ounces of total pile yarn per cubic yard, as shown in the following formula.

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D = \underline{36 \text{ x (Pile Weight)}}
(t or T)
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- 4. Materials for Pile Yarn:
  - a. Nylon (Continuous Filament BCF) Average filament size for fiber shall be 3.0 denier or greater for Type I applications and 12 denier or greater for Type II applications.
  - b. Polyester (PET) (Continuous Filament BCF) Average filament size for fiber shall be 3.0 denier or greater for Type I applications and 12 denier or greater for Type II applications.
- \*Reference ASTM D5684 Terminology for definition of Level and Multi-level Pile Yarn Floor Covering
- 5. Dimensional Stability, max. (in.) ASTM D7570 based on a product dimension for an 18"x18" at a % Change of +/-.15%

Table 1.0

Product Minimum Requirements and Test Methods for Product Classification Types I and II

Characteristic	Minimum Value	Test Method
Pile Yarn Weight (oz. / yd²)	Table 2.0 A & B	ASTM D5848 – Mass Per Unit Area of Pile Yarn Floor Covering
Tuft Bind (lb.)	6.25 lb - Product Construction Type A, 3.0 lb Product Construction Type B	ASTM D1335 - Tuft Bind of Pile Yarn Floor Covering
Delamination Strength of Secondary Back (lb./in) - Broadloom/Modular	2.51b f/in	ASTM D3936 - Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering
Colorfastness to Light - Xenon Arc	4.0 after 40 fading units	AATCC Test Method 16.3, Colorfastness to Light – Xenon Arc using AATCC Evaluation Procedure 1
Colorfastness to Crocking	4.0	AATCC Test Method 165, Colorfastness to Crocking using AATCC Evaluation Procedure 2 or 8
Density (oz./yd³)	Table 2.0 A & B	Density = $\underline{36 \text{ x (Pile Weight)/(t or T)}}$
Assessment of Surface Appearance Changes using the CRI Reference Scale	2.5	ASTM D6119 Practice/Shaw Patented Steps Technology or ASTM D5252/ASTM D7330- Assessment of Surface Change
Dimensional Stability, max. (in.) - Structured/ Extruded/Hard Back, Attached Cushion Modular	+/027 in.	ASTM D7570 Standard Test Method for Evaluation of Dimensional Stability of Pile Yarn Floor Covering

Copies of ASTM standards are available from American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA, 19428-2959 USA Website: <a href="https://www.astm.org">www.astm.org</a>

Copies of AATCC standards are available from American Association of Textile Chemists and Colorists (AATCC), PO Box 12215, Research Triangle Park, NC 27709. Website: www.aatcc.org

# **Type I** – Single and Multi-family Dwelling Units

- Class 1 For general to moderate traffic use in single-family dwellings and living units of multi-family dwellings.
- Class 2 For heavy traffic use in single-family dwellings and living units of multi-family dwellings.

Table 2.0A
Minimum Weight and Density Requirements for Product Classification-Type I

TYPE I	Construction Type	NYLON BCF		PET BCF	
Class		Wt.	Density	Wt.	Density
1	A. Level, Multilevel, or Textured Loop	20	3300	20	3300
1	B. Cut Pile Level and Multilevel, Cut and Loop	24	1050	24	1050
2	A. Level, Multilevel, or Textured Loop	26	4000	26	4000
2	B. Cut Pile Level and Multilevel, Cut and Loop	30	1725	30	1725

# **Type II** – Multi-Family Housing-Elderly and Care-Type Housing

- Class 1 For moderate traffic end use applications in public areas such as multi-family housing, associated living facilities, and all areas of Cre- Type housing, including private offices, sleeping rooms, and some administrative areas.
- Class 2 For heavy traffic end use applications at all levels but specifically for public areas such as lobbies, corridors of multi-family housing, assisted living facilities, and all areas of Care-Type housing, open offices, entrance ways, and areas where large numbers of people congregate.

Table 2.0B Minimum Weight and Density Requirements for Product Classification - Type II

Type II	Construction Type	NYLON BCF		PET BCF	
Class		Wt.	Density	Wt.	Density
1	A. Level, Multilevel or Textured Loop	14	3600	16	4000
1	B. Cut Pile Level and Multilevel, Cut and Loop	20	2800	26	4000
2	A. Level, Multilevel or Textured Loop	20	4200	24	4350
2	B. Cut Pile Level and Multilevel, Cut and Loop	24	4000	30	4500

### **CERTIFICATION AND LABELING:**

This certification program shall be in accordance with UM 44d, HUD Building Product Standards and Certification Program for Carpet, except as modified by the provision of this Materials Release (MR), and will be administered by MEA Certification, Inc. which is qualified under the Administrator Qualifications and Procedures for HUD Building Product Certification Programs, 24 CFR 200.935.

- 1. MEA Certification, Inc. shall issue to the carpet manufacturer a label, stamp, or mark containing the Administrator's validation mark, the manufacturer's statement of conformance to this MR, the manufacturer's name, and the code identifying the manufacturing plant location.
- 2. On Broadloom carpet products, the certification label, stamp, or mark shall be applied to each carpet at least every six (6) feet, and not less than one (1) foot from the edge of the carpet.
- 3. On Modular products (defined as various shapes and sizes of carpet product precut during manufacturing), the label, stamp, or mark shall be applied on the back at a frequency not less than once every 100 square feet.
- 4. Each product tested and certified under an initial certification program shall undergo physical testing as follows: three (3) production samples per year, are to be submitted from material produced in the facilities listed within this bulletin. One sample will be submitted annually based on the initial certification, with one additional sample sent at four-month and eight-month interim intervals after the annual submittal. All samples shall be submitted to the Administrator for testing in a laboratory accredited by the National Laboratory Accreditation Program (NVLAP) of the U.S. Department of Commerce.
- 5. The Administrator shall also visit each of the production facilities and review the manufacturer's quality assurance procedures every six (6) months to ensure that the manufacturer is following them.
- 6. If changes are made to the products covered by this MR, the approved third-party certification company shall notify HUD, of these changes and suggest whether to keep/maintain, revise, or suspend this MR within 30 days.

### MANUFACTURING PLANTS:

The products covered under this MR will be produced at the following plants:

Shaw Plant 04 2225 South Hamilton Ext. Dalton, GA 30720 Shaw Plant WD 2305 Abutment Road Dalton, GA 30720

Shaw Plant 81 201 Springdale Road Dalton, GA 30720 Shaw Plant WE 616 Duvall Road Chatsworth, GA 30705

Shaw Plant 15 5225 Hwy 411 NW Cartersville, GA 30120 Shaw Plant 13 1061 West Avenue SE Cartersville, GA 30120

Shaw Plant T1 7195 Adairsville Hwy Adairsville, GA 30103

The contact person for all matters concerning this MR or issues regarding FHA certification at Shaw Industries, Inc. shall be:

Mr. Dennis Hart

Group Manager, Product Performance and Certification, Shaw Technical Support,

PO Box 2128, Mail Drop 003-04

Dalton, GA 30722-2128 PH: 706-532-2653

Email: dennis.hart@shawinc.com

### WARRANTY:

Shaw Industries, Inc. warranties this carpet against defects in materials, poor performance, or poor workmanship, under normal use for five (5) years from the date of installation. Should any defect, poor workmanship, or poor performance occur, Shaw Industries, Inc. shall make a prorata allowance for the cost of replacements.

The manufacturer's warranty does not, in any way, relieve the builder of responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program. A copy of the manufacturer's warranty shall be furnished by the builder to the owner upon completion of the installation.

### MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

- 1. Produce, label, and certify the material, product, or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance, or failure reported by HUD.
- 3. When requested, provide the Office of Manufactured Housing Programs, HUD Headquarters with a representative list of properties in which the material, product or system has been used, including complete addresses or descriptions of locations, and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership, or mailing address.
- 5. If significant changes are made to the product that would by definition revise the previously recognized facts, HUD and all third-party review agencies will be informed within 30 days of formal implantation of these significant changes.
- 6. Records of third-party review agency audit visit reports and all test results shall be made available at each production facility.

### **EVALUATION:**

This Materials Release shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this Materials Release shall apply for renewal or revision 90 days prior to the Review Date printed on this Materials Release. Submittals for renewal or revisions must be sent electronically to HSGmps@hud.gov.

Appropriate user fee(s) for the TSP program can be submitted through the Pay.gov website at https://pay.gov/public/form/start/73881741.

The holder of this Materials Release may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the Materials Release.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate user fee for a revision will need to be submitted in accordance with 24 CFR § 200.934 User fee system for the technical suitability of products program, and the current user fee schedule.

### CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the Materials Release. HUD will notify the manufacturer that the Materials Release may be canceled when:

- 1. Conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- 2. the manufacturer has changed its organizational form without notifying HUD, or,
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the Materials Release should not be canceled. No refund of fees will be made on a canceled document.

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\* This Materials Release is issued solely for the captioned firm and is nontransferable to any person or successor entity.