DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Housing - Federal Housing Commissioner

Series and Series Number:

MATERIALS RELEASE NO: 1276g

(Supersedes issue dated February 7, 2019)

TO: DIRECTORS, SINGLE FAMILY HOCs **DIRECTORS, MULTIFAMILY HUBs**

ISSUE DATE

January 12, 2022

REVIEW DATE

January 12, 2025

SUBJECT: Product Viega LLC PureFLow® PEX Cross-linked Polyethylene (PEX) Plumbing System Consisting of Viega PureFLow PEX Pipe and Fittings

2. Name and address of Manufacturer

Viega LLC 585 Interlocken Blvd. Broomfield, CO 80021

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.

USE: The Viega LLC PureFlow® PEX cross-linked polyethylene (PEX) plastic pipe and fittings system is intended for use in potable hot and cold water distribution systems up to a maximum continuous pressure of 160 psi at 73°F and 100 psi at 180°F. It may also be used in hydronic radiant heating systems fire sprinkler systems in one- and two-family dwellings and manufactured homes and non-potable reclaim distribution systems.

DESCRIPTION:

The Viega LLC PureFlow® PEX water distribution system shall be made from high density polyethylene per ASTM F876. The pipe shall have one standard dimension ratio (SDR9) and the fittings shall have a nominal size of 1/4" to 2". Only fittings recommended by Viega LLC are acceptable for use with this PEX system.

REQUIREMENTS:

The Viega LLC PureFlow® PEX water distribution system shall comply with the following standards or more recent versions:

AWWA C904-06	"Cross-Linked Polyethylene (PEX) Pressure Pipe, ½ in (12mm) through 3 in (76mm), for Water Service"
ASTM E 84-2021a	"Standard Test Method for Surface Burning Characteristics of Building Materials"
ASTM F 876-2020b	"Standard Specification for Cross-linked Polyethylene (PEX) Tubing"
ASTM F 877-2020	"Standard Specification for Cross-linked Polyethylene (PEX) Plastic Hot-and-Cold Water Distribution Systems"
ASTM F 1807-2019b	"Standard Specification for Metal Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing"
ASTM F 2159-2021	"Standard Specifications for Plastic Insert Fittings Utilizing a Copper Crimp Ring for SDR9 Cross-linked Polyethylene (PEX) Tubing."
ANSI/NSF 14-2020	"Standard for Plastic Piping System Components and Related Materials". The tubing and fittings shall comply with all of the performance requirements as outlined in NSF-14.
ANSI/NSF 61-2020	"Standard for Drinking Water Systems Components Health Effects"
IM-PF 724596 0621	"Viega PEX Water Systems Installation Manual"
NFPA 13D-2022	"Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes."
UL 1821-2019	"Thermoplastic Sprinkler Pipe and Fittings for Low Pressure Dry Pipe Applications."

ASTM F3347-2021 "Standard Specification for Metal Press Insert Fittings

wtih Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene for Raised Temperature (PE-RT)

Tubing."

ASTM F3348-21a "Standard Specification for Plastic Press Insert Fittings

with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene for Raised Temperature (PE-RT)

Tubing."

UL 2846-2021 Fire Test of Plastic Water Distribution Plumbing Pipe

for Visible Flame and Smoke Characteristics (Ed.1)."

INSTALLATION:

1. The Viega LLC PureFlow® PEX plastic pipe and fitting system shall be installed according to the manufacturer's instructions described in the current revision of Viega LLC PureFlow® Water Systems Installation Manual.

- 2. Only fittings approved by Viega LLC shall be used.
- 3. The PEX plastic pipe shall not be exposed to direct sun light for more than 6 months while the polymer fittings shall not be exposed for more than 15 days.
- 4. Keep the Viega PureFlow[®] PEX Tubing (PEX) a minimum of 12" vertically and 6" horizontally from sources of high heat such as recessed light fixtures, gas flue vents, heating appliances, or electric motors.
- 5. PEX plastic pipe should not be anchored rigidly but allow for thermal expansion. Refer to section 12.9 Tubing Expansion in Viega PureFlow Water System Installation manual.

MANUFACTURING PLANT LOCATIONS:

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

Viega LLC 2211 Viega Avenue McPherson, KS 67460 Sam Ediger 316-425-7400 Viega GmbH & Co. KG An der Mühle 4 D-99518 Groβheringen Germany Anita Pilka 011 49 2722 61 1117

CERTIFICATION:

Viega LLC certifies that the Viega PEX cross-linked polyethylene pipe and fittings and systems shall be produced in conformance to this MR and are in compliance with a validation program at NSF International, Inc., in accordance with the Code of Federal Regulations, 24 CFR 200.935. NSF International, Inc. shall inspect the manufacturer's facility to assure that the quality control procedures are being followed. Four samples of this product shall be selected and tested each year to validate the manufacturer's conformance to the requirements of this MR. Each pipe and fittings certified as conforming to this MR, shall be labeled with the following information:

- 1. The NSF validation mark.
- 2. The manufacturer's name.
- 3. The manufacturer's conformance to this MR.
- 4. The fittings made from polysulfone resin shall be identified as PSU
- 5. The fittings made from accudel and radel resin shall be identified as PPSU.

WARRANTY:

Viega LLC warrants the Viega PureFlow[®] PEX cross-linked polyethylene pipe and fittings systems specifically to the terms of the applicable Viega LLC Limited Warranty.

This warranty does not relieve the builder, in any way, of responsibility under the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (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.

EVALUATION:

This MR 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 MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to:

U. S. Department of Housing and Urban Development Office of Manufactured Housing Programs 451 7th Street. SW, Room 9170 Washington, DC 20410-8000

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 MR may apply for revision at any time prior to the Review Date. Minor revision may be in the form of a supplement to the MR.

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 Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

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

- 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 MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned firm and is not transferable to any person or successor entity.