



Standard Practice for Installation of Rigid Poly(Vinyl Chloride) (PVC) Siding and Soffit¹

This standard is issued under the fixed designation D4756; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice covers the basic requirements for and the methods of installation of rigid vinyl siding, soffits, and accessories on the exterior wall and soffit areas of buildings. In all applications, refer also to the specific manufacturer's installation instructions and the requirements of applicable building codes.

1.2 This practice covers aspects of installation relating to effectiveness and durability in service.

1.3 The various application systems are located in the following sections of this practice:

Substrate, Surface Preparation	Section 8
Application of Horizontal Siding	Section 9
Application of Vertical Siding	Section 10
Application of Soffits and Fascia	Section 11
Special Details	Section 12

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

NOTE 1—There is no known ISO equivalent to this standard.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This practice is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.24 on Plastic Building Products. Current edition approved Jan. 15, 2021. Published January 2021. Originally approved in 1991. Last previous edition approved in 2015 as D4745 – 15. DOI: 10.1520/D4756-15R21.

2. Referenced Documents

- 2.1 *ASTM Standards*:²
 - D883 Terminology Relating to Plastics
 - D1600 Terminology for Abbreviated Terms Relating to Plastics
 - D3679 Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding
 - D4477 Specification for Rigid (Unplasticized) Poly(Vinyl Chloride) (PVC) Soffit
 - E631 Terminology of Building Constructions
 - E2112 Practice for Installation of Exterior Windows, Doors and Skylights

3. Terminology

3.1 *General*—Definitions are in accordance with Terminologies D883 and E631 and abbreviations with Terminology D1600 unless otherwise indicated.

3.2 *Definitions of Terms Specific to This Standard*:

3.2.1 *backerboard*—a flat material used on the face of the house, applied between the studs and the siding (or over existing wall surface) to provide an even surface for the installation of the vinyl siding.

3.2.2 *buttlock*—the bottom of a siding or soffit panel, or accessory piece, opposite the nail hem, which locks onto the preceding panel.

3.2.3 *crimp*—small protrusions, typically approximately ½ in. (12.7 mm) long, ⅛ in. (3.2 mm) wide, and projecting ⅛ in. (3.2 mm) formed by a crimper (snaplock punch). (See Fig. 2.)

3.2.4 *crimper*—a special hand tool designed to form crimps (snaplock ears) intended to hold partial panels in place. (See Fig. 2.)

3.2.5 *face nail*—the action of fastening directly on to the “face,” or exposed surface, of a panel (instead of using the nail slot).

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

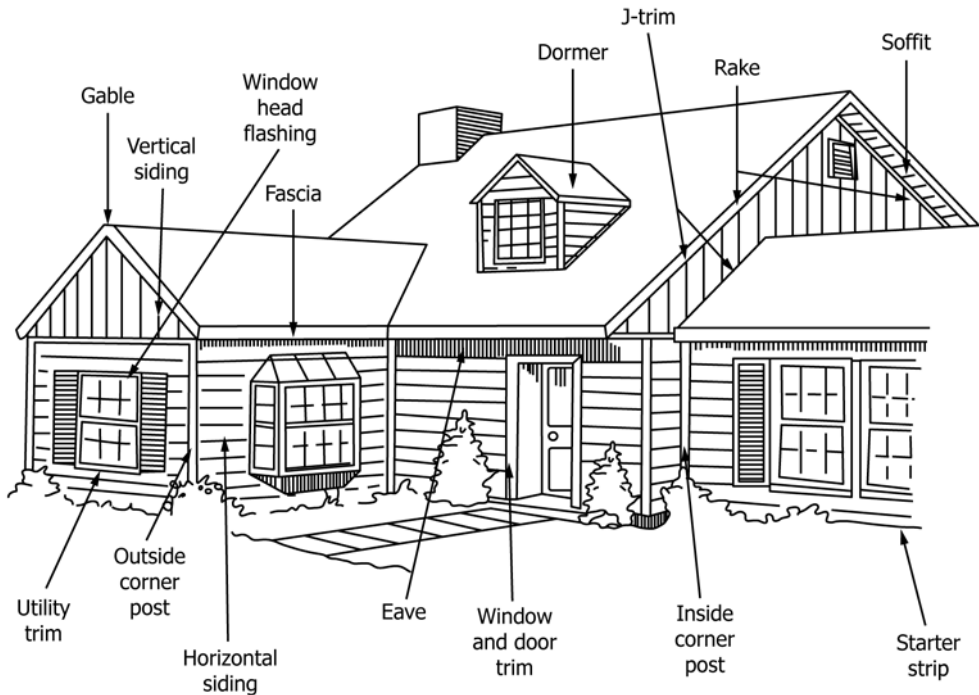
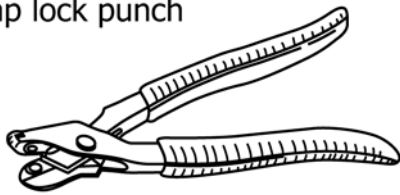
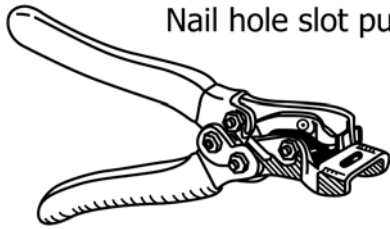


FIG. 1 Terminology for Buildings, Siding and Accessories

Snap lock punch



Nail hole slot punch



Unlocking tool



FIG. 2 Siding Installation Tools

windows, doors, mechanical penetrations, and roof-wall intersections, designed and intended to move incidental water to the building exterior.

3.2.8 *furring/furring strip*—a wooden or steel framing material, usually a nominal 1 by 2 in. (25.4 by 50.8 mm) used to even the surface in preparation for installation of siding. To “fur” a surface means to apply these strips.

3.2.9 *nailslot punch*—a special hand tool used to create slots for attachment of field-modified siding or accessories. (See Fig. 3.)

3.2.10 *rake (roof)*—the inclined, usually projecting edge of a sloping roof.

3.2.11 *rake (wall)*—the board or molding placed along the sloping sides of a gable to cover the ends of the siding.

3.2.12 *snaplock ears*—see *crimp* and Fig. 2.

3.2.13 *snaplock punch*—see *crimper* and Fig. 2.

3.2.14 *soffit*—the underside surface (typically horizontal) of roof overhangs.

3.2.15 *starter strip*—an accessory applied directly to the surface of the building and used to secure the first course of siding to the home. Starter strips can either be a part manufactured for the specific purpose or created by cutting the nailing hem and adjacent lock from a siding panel.

3.2.16 *undersill trim (utility trim)*—an accessory strip used to receive and hold the crimped edge of horizontal or vertical siding that has had its normal lock removed.

3.2.17 *zip tool (unlocking tool)*—a special hand tool used to separate interlocked siding panels. (See Fig. 2.)

3.2.6 *fascia*—the trim covering the ends of roof rafters. (See Fig. 1.)

3.2.6.1 *fascia board*—a board attached to the ends of the rafters between the roofing material and the soffit overhang.

3.2.6.2 *fascia cap or cover*—the covering around a fascia board.

3.2.7 *flashing*—special membrane pieces or manufactured trim pieces used to supplement siding panels in weather protection around joints, penetrations, and openings, such as

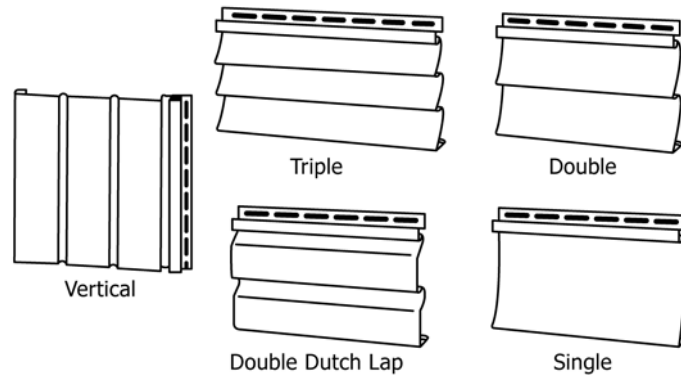


FIG. 3 Typical Siding Profiles

4. Delivery of Materials

4.1 All manufactured materials shall be delivered in the original packages, containers, or bundles bearing the size or type product, or both, brand name, and manufacturer (or supplier) identification, manufacturer’s lot number, and the ASTM specification to which it conforms.

5. Protection of Materials

5.1 Do not store in any location or in any manner where the temperature of the siding, soffit or accessories is likely to exceed 130°F (54°C).

5.2 Store the cartons on a flat surface and support the entire length of the cartons.

5.3 Store the cartons away from areas where falling objects or other construction activity could impact the cartons. Keep the cartons dry.

5.4 Do not store the cartons in stacks more than 6 boxes high.

6. Environmental Conditions

6.1 Vinyl siding and accessories will expand when heated and contract when cooled. If siding is installed in hot weather and the siding is very warm it will be partially “expanded.” Provide allowance for more future “contraction” than expansion.

6.2 Leave ¼ in. (6.4 mm) clearance between the ends of panels and trim and any receiver such as J-channels and corner posts to allow for thermal expansion. If installing during weather colder than 40°F (4.4°C), increase the minimum clearance to ⅜ in. (9.5 mm) to allow for additional expansion during warmer weather.

7. Materials

7.1 *Horizontal Wall Siding*—See Specification D3679.

7.2 *Vertical Wall Siding*—See Specification D3679

7.3 *Soffit Panels*—See Specification D4477.

7.4 *Accessories:*

7.4.1 *Starter Strip*—For horizontal siding made of poly(vinyl chloride) or corrosion-resistant metal.

7.4.2 *Corner Posts*—Of two types: for inside corners and for outside corners of poly(vinyl chloride).

7.4.3 *Trim Channels*—Produced of poly(vinyl chloride) in a variety of designs and sizes for use around openings and edges of wall and soffit surfaces. (See Fig. 5.)

7.5 *Fasteners:*

7.5.1 *Nails*—Corrosion-resistant with head diameter 5/16 in. (7.9 mm) minimum, shank diameter 1/8 in. (3.2 mm), length sufficient to penetrate not less than 3/4 in. (19 mm) into framing or furring.

7.5.2 *Staples*—Corrosion-resistant, 16 gage minimum, with 3/8 to 1/2-in. (9.5 to 12.7-mm) crown, length sufficient to penetrate not less than 3/4 in. (19 mm) into framing or furring.

7.5.3 *Screws*—Corrosion resistant, self-tapping type, No. 8 truss head or pan head length sufficient to penetrate wall thickness of steel stud or 3/4 in. into framing or furring.

NOTE 2—To minimize the possibility of any color variation use material from a single manufacturer’s lot number for application to one building.

8. Substrate, Surface Preparation

8.1 *Water-resistant Barrier*—Vinyl siding must be installed over a water-resistant barrier system that includes (1) a continuous water-resistant material, and (2) properly integrated

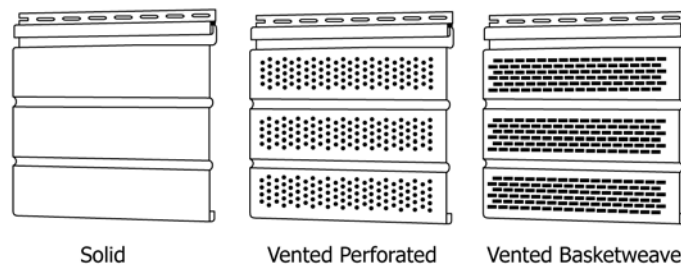


FIG. 4 Typical Soffit Profiles