Designing Style

A Guide to Designing with Today’s Vinyl Siding

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What We Will Cover

- Why Vinyl Siding?
- VSI Certification Programs
- Product Overview
- Architectural Styles
Why Vinyl Siding?
Introduction

- The inspiration for vinyl siding came from the early craftsmen who designed and built in Dutchlap and Victorian traditions
- Innovation came with the ability to develop and produce a highly cost-effective, durable, and aesthetically pleasing product
- The result is today’s vinyl siding – the most popular exterior cladding in the United States and Canada for new construction and remodeling
Vinyl siding was first produced in the late 1950’s

Early manufacturing processes made it difficult to produce and then install a consistent, quality product

In 1969, the first post-form vinyl siding was manufactured -- Opened the door for the next generation of vinyl siding

The use of vinyl siding grew steadily because of the basic advantages it provided, including low maintenance, value and easy installation

The transformation of the product continued into the 1970’s and 1980’s, and it’s still evolving today
The vinyl siding industry has made numerous improvements in formulation:

- Product can be produced faster
- Co-extrusion
- Resists impacts
- Electronic color blending
- Allows an unlimited range of colors
- Smooth finishes without harsh light reflection

These improvements led to the development of a wide range of decorative architectural trim and accessories.

Today’s vinyl siding beautifully replicates wood, without wood’s maintenance issues or high cost.
Options for profile design, colors, and architectural trim and accessories continue to grow, and now vinyl siding can be used to achieve virtually any architectural style.

Vinyl siding has the advantage of simple maintenance:
- Never requires painting, staining, or sealing
- Can be cleaned with mild soap and water

With the ability to withstand high winds and a composition that resists heat, cold, and moisture, vinyl siding retains its great looks over time.

Warranties offered by vinyl siding manufacturers are among the longest and strongest in the cladding industry.
Durability / 2004
Durability / 2004
To meet today’s environmental challenges, vinyl siding is engineered for sustainability:
- Can contribute to points in leading green building certification programs
- Boosts a home’s R-value (insulated vinyl siding)
- Generates virtually no manufacturing waste
- Produces little installation waste
- Requires fewer resources to maintain
- Engineered to last
- Offers better environmental performance
- Balances economic with environmental performance
- Contributes less to global warming than brick
- Releases fewer toxic chemicals than other exterior cladding
- Emits less dioxin
- Poses no serious health risk

Visit [www.vinylsiding.org](http://www.vinylsiding.org) for information on VSI’s green webinar
Vinyl Siding Certification Programs
Architects/designers and other building product specifiers want assurance that the homes they’re designing will look beautiful and are durable with the passage of time.

Vinyl siding is the only exterior cladding with both third-party product certification and certified installer programs.
The VSI Vinyl Siding Product Certification Program, allows manufacturers to certify with independent, third-party verification that their products meet or exceed the industry standard for quality – ASTM D3679.

Vinyl siding that meets this ASTM standard will:
- Withstand the impacts of recommended installation procedures
- Stay on the house in heavy winds of at least 110 miles per hour
- Lay straight on a flat wall and not buckle under normal conditions
- Withstand the effects of normal seasonal temperature fluctuations

VSI’s certified product labels on cartons of vinyl siding or VSI’s certified product logo on promotional materials assure the quality of vinyl siding and accessories. Visit VSI’s website at www.vinylsiding.org for a current list of certified vinyl siding products and colors.
VSI Vinyl Siding Product Certification Program

- Vinyl siding also can be certified for color retention
- In addition to meeting the performance requirements of ASTM D3679 for quality, VSI’s color retention certification program includes colors that have been certified to meet or exceed the color retention requirements of ASTM D6864 or D7251 and requires an outdoor weathering study be conducted for each color being considered
- Each certified color must demonstrate the ability to resist major changes over time in a variety of climates
- Currently, nearly 950 products are certified for quality through VSI’s program
- Nearly 350 colors are certified for color retention
- Approximately 97 percent of all vinyl siding reported to be manufactured in the United States is certified through the VSI program
The **VSI Certified Installer Program** trains and tests experienced vinyl siding installers on their knowledge of proper vinyl siding installation techniques based on the industry standard, **ASTM D4756**.

To qualify for VSI’s **Certified Installer Program**, candidates must have at least one year of experience installing vinyl siding, architectural trim and accessories.

All VSI Certified Installers must apply for recertification every three years, ensuring that they are using the most up-to-date installation techniques.

Currently, there are nearly 4,000 individuals certified under this program. When certified, installers are listed on a national registry found on VSI’s website at [www.vinylsiding.org](http://www.vinylsiding.org).
Product Overview
Traditional Profiles

- Three vinyl siding profiles dominate
  - Clapboard
  - Dutchlap
  - Beaded
- Easily distinguishable from each other and have varied historic and geographic roots
- Versatility leads to applications in many of the classical derived architectural styles including Georgian, Adam, Greek Revival, and Queen Anne Victorian, among others
Traditional Profiles: Clapboard

- Clapboard siding was originally made by Native Americans with the timber from the land.
- Tradition continued for centuries until modern industry, economics and home building techniques took over.
- Clapboard was also used in certain parts of Europe where wood-framed construction was more dominant.
- Vinyl siding clapboard profiles are available in single, double, and triple “courses,” or rows at varying heights, or “reveals” on each profile.
Lummi Native American Cedar Plank House 1930
Clapboard
Clapboard
Traditional Profiles: Dutchlap

- Dutchlap was popularized in the Mid-Atlantic region of the United States during early settler days
- Its origin dates back to Northern Europe in areas where wood construction was most popular
- Provides strong shadow lines and is a popular alternative to the standard clapboard façade
- Similar to clapboard, Dutchlap vinyl siding profiles have multiple courses with typical reveals of three to five inches
Dutchlap
Traditional Profiles: Beaded

- Beaded siding was developed to provide even more dramatic shadow lines by adding a rounded bead at the bottom of a single clapboard course.
- Originated in the Southern United States and was commonly used on buildings that pre-date 1800.
- Beaded vinyl siding precisely replicates the handcrafted bead that was originally produced in wood.
- The reveals are typically six to seven inch single courses.
Beaded Clapboard
Traditional Profiles: Insulated

- Insulated (backed) siding is one of the most popular product innovations on the market
  - Increases the exterior wall’s R-value
  - Improves impact resistance
  - Helps replicate the feel of a solid wood plank

- Two types of insulated siding are available
  - Foam backer adhered to the vinyl siding for a one-piece siding and insulation system
  - Foam backer custom-contoured for a snug fit during installation

- Both types are available in a variety of profiles and reveals

Insulated Clapboard 6”

Insulated Dutchlap 4.5”

Insulated Beaded 6.5”
Vinyl and other polymeric siding are the only exterior cladding that comprehensively recreates the specialty cladding profiles that are frequently associated with Cape Cod, Queen Anne and Folk Victorian, Craftsman, Shingle, and other derivatives of Classical Architecture.

These specialty profiles come in three main categories:
- Vertical siding
- Shingles/shapes
- Shakes
Specialty Profiles: Vertical

- Vertical siding has been used on many different architectural styles dating back to medieval times.
- Architectural styles using vertical siding include Stick, Folk Victorian, Tudor, and Craftsman.
- Today’s vinyl siding accurately reproduces the increasingly popular board and batten profile consisting of alternating wide and narrow panels.
  - Some vinyl soffit can also be applied vertically.
  - These applications are often used as accents, but are also used in whole house applications.
- Vertical vinyl siding profiles are typically specified by profile and reveal.

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Vertical Siding
Vertical Siding
Vertical Siding
Specialty Profiles: Shingle/Shapes

- Shingle siding gained popularity in the late 19th Century, mainly in the Northeastern United States
- Now widely used in areas where certain architectural styles – such as, Cape Cod, Queen Anne, and Craftsman – are dominant
- Shingle siding is used in whole house applications or as an accent, most commonly on gables and dormers
- Adds distinction to a design and greatly enhance curb appeal
- Versatile technology allows vinyl siding to comprehensively recreate a great variety of shingle profiles
- These profiles are typically manufactured as a single reveal of five to seven inches and are usually specified by the shape they replicate

Scallops - Rounds
Shingles - Square
Mitered Corner
Octagon
Hexagon
Half Cove
Shingle and Scallop Accents
Shingle on Gable End
Specialty Profiles: Shake

- Vinyl shakes offer the authentic appearance of rugged, hand-cut cedar
- Can be used for whole house applications and as an accent on gables and other sections of the façade
- Used in combination with other cladding materials on a variety of architectural styles
- Typically manufactured as a single or double course with reveals of six to ten inches and are offered in straight edge or staggered courses
- Also available in injection-molded polypropylene
Shake
Scallop and Shake Accents
- Vinyl soffit comes in several varieties
  - Solid
  - Beaded
  - Ventilated
  - Hidden ventilated
- Specified by reveal and style
- Available in a variety of colors, white is the most popular choice
- Some solid vinyl soffit can also be used for vertical siding applications

![Triple 4” Solid](image1)

![Triple 3⅓” Beaded](image2)

![Double 5” Ventilated](image3)

![Triple 3⅓” Hidden Ventilated](image4)
Soffit
Architectural Trim and Accessories

- Architectural trim and accessories complete the design vision and enhance all architectural styles.
- Virtually any type of trim or accessory that has been traditionally produced in wood is available in vinyl and other maintenance-free materials — without the wood-based worries of painting, swelling, cracking, warping or insects.
- Can be applied on the base, on the frieze and on everything in between.
- The range of architectural trim and accessories includes door and window trim, molding, corners and a variety of decorative accents.
Architectural Trim
Architectural Trim
Architectural Trim
Today’s vinyl siding is available in a vast spectrum of colors to suit any style or taste.

Vinyl siding colors can be certified to meet or exceed the color retention requirements of ASTM D6864 or D7251, if they already meet the performance requirements of ASTM D3679.
Vinyl siding profiles are available in varying textures from deep woodgrain to smooth, which replicates sanded, sealed, and painted wood.

Specialty vinyl siding profiles like shakes and shingles are also available in a variety of textures to simulate authentic cedar shakes.

**Smooth Beaded:**
Smooth or sanded woodgrain textures are ideal for the exteriors of Greek Revival, Italianate or Georgian houses.

**Woodgrain:**
Woodgrain textures recreate the look of real wood siding.

**Rough Hewn:**
The rugged textures that simulate rough hewn cedar shakes can enhance the rustic look of Cape Cod or Craftsman styles.
Architectural Styles
Introduction

- We will showcase six house designs, each featuring a different architectural style used as precedent
  - Not intended to represent strict architectural principles, but rather demonstrate design variations inspired by each style
- Styles include: Cape Cod, Federal/Adam, Greek Revival, Italianate, Queen Anne and Craftsman
  - Distinguishing characteristics
  - Overview of suggested vinyl siding profiles, colors, and architectural trim and accessories available to help achieve its look
- Vinyl siding brings a variety of neighborhood visions to life, whether it is recreating the look of historic neighborhoods or blending distinctive homes, shops, and other mixed-use buildings in a contemporary, new way
Cape Cod style originated in New England during the late 17th century. Early builders worked to integrate simple beauty into designs that were practical and comfortable. Historically, the style is characterized by a steep roof with side gables, a small roof overhang, and clapboard or shingle siding with contrasting trim. Today's Cape Cod houses may include 2 to 2½ stories or added wings, but still maintain the historic characteristics of simple beauty.
Cape Cod: Creating Style

- Profiles
  - Cape Cod houses can feature any traditional profile
    - clapboard, beaded, or Dutchlap – as the main exterior cladding

- Shapes
  - Shakes or shingles are also common as the primary exterior cladding

- Color
  - A light to medium palette in all colors except reds, greens, and browns is typical for Cape Cod houses
  - Dark gray or blue are options for shake or shingle cladding

- Trim and Accessories
  - Trim options suited for Cape Cod style include:
    - Crown and dentil molding for fascia or friezes (or both)
    - Beaded soffits
    - Decorative front door surrounds with triangular pediments and pilasters
    - Window crowns or pediments and lineals,
    - Gable vent covers
    - Shutters
Cape Cod: Creating Style

- Straight Edge Shakes
- Corner Post
- Vent Cover
- Shutters
- Ventilated Soffit
- Window Lineal
Designers are using vinyl siding, trim and accessories to achieve a variety of attractive looks inspired by the simple beauty of the Cape Cod style.

**Profile:**
- Single 7” Split Shake

**Trim:**
- Crown Window Molding
- Window Lineals
- Dentil Molding
- Wide Corner Posts
- Gable Vent Cover
- Shutters

**Profile:**
- Double 4½” Clapboard

**Trim:**
- Window Lineals
- Pilaster Set
- Shutters
Cape Cod
The Federal style is an adaptation of the more practical Georgian style – the difference is in the details.

Originally adapted by two British brothers surnamed Adam, the Federal style is more likely to have delicate features and an array of decorative flourishes inspired by Greek and Roman monuments.

Like its Georgian predecessor, Federal style typically features symmetrical rows of windows around a centered door.

Designs commonly are differentiated by Palladian windows, and include embellishments such as a semicircular fanlight over the front door, circular or elliptical accent windows, and decorative swags, garlands, and moldings.

Dentil molding in the cornice is a common distinguishing feature of Federal/Adam houses.
Federal/Adam: Creating Style

- Profiles
  - Federal/Adam houses frequently feature clapboard as the dominant exterior cladding, however, Beaded and Dutchlap styles are also used.

- Color
  - Historically, a light to medium palette was common in all colors except reds, greens, and browns.
  - Modern interpretations incorporate a much broader variety of colors, including deeper hues.

- Trim and Accessories
  - Options suited for Federal/Adam style include:
    - Heavy cornice with crown
    - Medallions or dentil molding on fascia or frieze (or both)
    - Decorative front door surrounds with elliptical fanlight transoms and head trim
    - Triangular or broken pediments and pilasters
    - Window crowns with keystone trim
    - Pediments and lineals,
    - Band boards at foundation
    - Beaded soffit
    - Roof balustrade
    - Shutters
Federal/Adam: Creating Style

- Corner Post
- Pilaster
- Door Mantle
- Window Mantle with Dentil Trim
- Windowsill/Lineal
- Column Wrap
- Shutters
- Molding
- 4" Clapboard
- 6½" Dutchlap
- Window Lineal
Vinyl siding, architectural trim and accessories can be used to emphasize the clean lines and delicate details inspired by the Federal/Adam style.

**Profile:**
- Hand Split Shake

**Trim:**
- Crown Window Molding
- Corner Posts
- Window Lineals
- Band Board
- Column Wraps
- Shutters

**Profile:**
- Double 4” Clapboard

**Trim:**
- Dentil Molding
- Window Crown Molding
- Keystone
- Corner Posts
- Column Wraps
- Shutters
Reflecting a growing interest in Classical architecture, the Greek Revival style is essentially a Georgian design, turned on end so the gable faces the street.

The gable can be an impressive pediment that is flat or rests on a row of massive columns that often stretches across the entire façade – which also typically includes an expansive, ornate porch – creating a “Greek temple” look.

Cornice lines with a wide band of trim beneath frequently appear.

This trim band often is divided in the Classical style with a frieze above and architrave below.

Doorways can be particularly elaborate, surrounded on the top and both sides by side lites and accented by a decorative door surround.

Greek Revival was the most popular style of architecture for American houses from about 1830 to 1860.
Greek Revival: Creating Style

- Profiles
  - Greek Revival houses may feature clapboard or beaded profiles as the main exterior cladding

- Color
  - Historically, whites or ivories dominate Greek Revival exteriors
  - Modern interpretations can include a palette of other light colors – or even feature dark hues

- Trim and Accessories
  - Options suited for Greek Revival style include:
    - Heavy cornice with shingle
    - Crown, dentil or bed molding on fascia or frieze (or both)
    - Decorative front door surrounds with triangular or broken pediments and pilasters
    - Window crowns with keystone trim or pediments and lineals
    - Band boards at foundation or between floors
    - Beaded soffit
    - Roof balustrade
    - Gable vent covers
Greek Revival: Customizing Style

- A variety of classical looks inspired by the Greek Revival style can be created when designing with vinyl siding, trim and accessories

**Profile:**
- Double 4” Clapboard

**Trim:**
- Beaded Corners
- Wide Window Lineals
- Crown Window Molding
- Keystone
- Pilaster Set
- Dentil Molding
- Shutters

**Profile:**
- Triple 3” Clapboard

**Trim:**
- Crown Molding
- Window Lineals
- Wide Corner Posts
- Band Board
- Column Wraps
Greek Revival
The most striking features of Italianate houses are usually its windows and distinctive cornices below low-pitched or flat roofs.

Numerous windows – single, paired, or even tripled – are typically tall, narrow, and elaborately crowned or framed.

Cornice lines under wide, overhanging eaves feature large brackets in a wide range of shapes and spacing.

Deep trim bands with decorative panels or moldings may further distinguish the cornice line.

Single story porches – either full-width, partial-width or surrounding only the entry – often protect double doors that are the same shape as the windows.

During the Victorian era, British architects developed a style inspired by the villas of Italy. The Italianate style became popular in America between 1850 and 1880.
Profiles
- Italianate houses may feature clapboard, Dutchlap, or beaded profiles as the dominant exterior cladding
- Not as common, but seen in modern interpretations, is board and batten style

Shapes
- Accents for the façade, window bays, and/or other portions of the exterior may be achieved with vinyl and other polymeric siding’s distinct shapes

Color
- Historically, a light to medium palette is used in all colors except reds, greens and browns
- Modern interpretations may include darker colors, especially for trim elements

Trim and Accessories
- Options suited for Italianate style include:
  - Crown and dentil molding for fascia or friezes (or both)
  - Simple to elaborate vertical eave brackets
  - Pedimented window crowns
  - Band boards at foundation or between floors
  - Beaded soffit
Italianate: Creating Style

- Soffit
- Decorative Brackets
- Half Cove
- Bay Corner
- Window Lineal
- Inside Corner Post
- Band Board
- Crown Molding
- Wide Window Lineal
- Fluted Corner Post
- Post Wrap
- 3" Clapboard
Vinyl siding, architectural trim and accessories are used to showcase the broad exterior surfaces and decorative accents inspired by the Italianate style.

**Profile:**
- Double 5” Clapboard

**Accent:**
- Beaded Soffit

**Trim:**
- Gable Brackets
- Crown Window Molding
- Decorative Brackets

**Profile:**
- Triple 3” Clapboard

**Trim:**
- Gable Brackets
- Window Surrounds
- Door Surrounds
- Porch Posts
- Band Board
Italianate
Italianate
Queen Anne: Defining Style

- The Queen Anne style features asymmetrical shapes, punctuated by steep roof pitches at various elevations.
- Shapes are partially defined by gables – usually including a dominant front-facing gable – combined with one or more polygonal, square, or round towers.
- Different wall textures, another defining attribute, are achieved with a mix of exterior cladding that may include clapboard, patterned masonry, brick, stone, and/or decorative shingles.
- The Queen Anne style also typically features a covered porch that often wraps around to one or two sides.

The most common of all Victorian styles, Queen Anne houses are distinguished by a combination of seemingly disparate characteristics. In fact, Queen Anne style assumes an attitude of “almost anything goes.”
Queen Anne: Creating Style

- Profiles
  - Queen Anne houses often feature clapboard as the dominant exterior cladding, although Beaded, Dutchlap and board and batten profiles are also used

- Shapes
  - Specific areas of the exterior – such as gable façades, and/or tower walls – are frequently accented by distinct shapes such as scallops, fish scale, octagon, hexagon, and mitered corner shingles

- Color
  - Queen Anne houses of the late 1800’s often were painted in multiple colors to draw attention to design elements
  - After 1900, whites and light creams dominated
  - Victorian color schemes commonly range from rich shades to bright jewel tones

- Trim and Accessories
  - An array of ornate embellishments is available for use with vinyl siding including:
    - Gingerbread trim and fretwork
    - Crown molding
    - Brackets
    - Corner block and rosette
    - Band board
    - Bay corners
    - Structural accessories – standard and decorative – are available
    - Columns and spindles for porches
    - Beadboard for porch ceilings
    - Corner posts
Queen Anne: Creating Style

- Gingerbread Trim
- Window Lineal
- Undersill Trim
- Running Trim
- Soffit
- Fish Scale
- Decorative Bracket
- Band Board
- Sunrise Pattern (clapboard profile)
- Bay Corner

5" Clapboard
To achieve the vastly eclectic looks inspired by the Queen Anne style, designers can use a wide variety of vinyl siding, trim and accessories.

**Profile:**
- Triple 3” Clapboard

**Accent:**
- Half Rounds
- Board and Batten

**Trim:**
- Fluted Window Lineals
- Fluted Corner Posts
- Crown Door Molding
- Column Wraps

**Profile:**
- Double 4” Clapboard

**Accent:**
- Half Rounds

**Trim:**
- Window Lineals
- Crown Window Molding
- Band Board
- Porch Posts
Queen Anne
Queen Anne
Craftsman houses – commonly one-story designs, often with a dormer – are characterized by a low-pitched gable roof, which may also be hipped.

Wide eaves are unenclosed, typically featuring exposed rafters to show off the craftsmanship of the builder.

Decorative (false) beams or brackets also are often included under gables.

Covered porches, either full- or partial-length, usually have roofs supported by tapered square columns with exaggerated bases that extend all the way to the ground.

Columns may have decorative wood, stone, or cobblestone pillars or pedestals that contrast with exterior cladding.
Craftsman: Creating Style

- Profiles
  - Craftsman houses often feature clapboard as the dominant exterior cladding

- Shapes
  - Shakes or shingles are also fairly common as the primary exterior cladding

- Accent Cladding
  - Craftsman house, gables or accent walls may feature board and batten siding, shakes, or shingles

- Color
  - Craftsman houses tend to emphasize medium to dark color palettes in any color or neutral color palettes featuring earth tones

- Trim and Accessories
  - Options suited for Craftsman style include:
    - Heavy eave brackets (knee braces)
    - “Timbered” or simple door and window crowns and lineals
    - Band boards at foundation or between floors
    - Gable vent cover, often tied in with geometric gable embellishment
    - Beaded soffit
    - Shingle or shake finish for massive column base piers
Craftsman: Creating Style

- Craftsman: Creating Style
- Tapered Column Wrap
- 4" Clapboard
- Wide Window Lineal
- Corner Post
- Decorative Bracket
- Soffit
- Window Lineal
- Board and Batten
- Band Board
- Staggered Shakes
- Tapered Column Wrap
To achieve a range of exterior finishes inspired by the Craftsman style, designers can select from a variety of vinyl siding, trim and accessories.

**Profile:**
- Triple 6” Clapboard

**Accent:**
- Shakes

**Trim:**
- Band Board
- Column Wraps
- Corner Posts
- Window Lineals

**Profile:**
- Split Shakes

**Trim:**
- Corner Posts
- Window Lineals
- Door Trim
- Column Wraps
Craftsman
Summary

- Vinyl siding has always been highly regarded in the building industry for its durability, low maintenance, and value.
- What’s changed is that the improved aesthetic qualities, sustainability, and performance of today’s vinyl siding are now featured on upscale homes, as well as on homes at all price points.
- High-tech engineering, quality manufacturing, and a focus on designing for diverse architectural styles are revolutionizing the way architects/designers and other building product specifiers can utilize vinyl siding for the houses they create.
Today’s vinyl siding is available in a broad and ever-increasing spectrum of colors to suit any style or taste – from varying shades of white to deep reds, blues, and greens and everything in between, all with proven performance for color retention.

Vinyl siding brings a variety of neighborhood visions to life, whether recreating the look of historic neighborhoods or blending distinctive homes, shops, and other mixed-use buildings in a contemporary, new way.
The information in this webinar can be found in VSI’s *Designing Style: A Guide to Designing with Today’s Vinyl Siding*

*Designing Style* was developed as a resource for designing with and/or specifying vinyl and polymeric siding, architectural trim and accessories.

To purchase a printed copy of *Designing Style* or to download a free PDF go to [www.vinylsiding.org/design](http://www.vinylsiding.org/design)
If you desire AIA/CES, CSI, AIBD and/or state licensing continuing education credits please visit AEC Daily (www.aecdaily.com) and search Vinyl Siding Institute.

If you have colleagues that might benefit from this seminar, please let them know.
Questions?

Designing Style: A Guide to Designing with Today’s Vinyl Siding

For more information on the beauty, durability, sustainability and value of today’s vinyl siding visit www.vinylsiding.org