

# Siding Permits

## Siding Permits

The **Minnesota State Building Code** requires a **Building Permit** for re-siding.

For Goodhue County projects that are located within the limits of a **city**, make application for a permit at the respective city hall. Each city has its own building permit application.

For Goodhue County projects that are located in an **unincorporated** area, outside of the limits of a city, make application for a permit first with the respective township clerk, then with the County Land Use Management Department. A list of townships and of the officers is found on the County Website at [www.co.goodhue.mn.us/visitors/cities\\_twps.aspx](http://www.co.goodhue.mn.us/visitors/cities_twps.aspx).



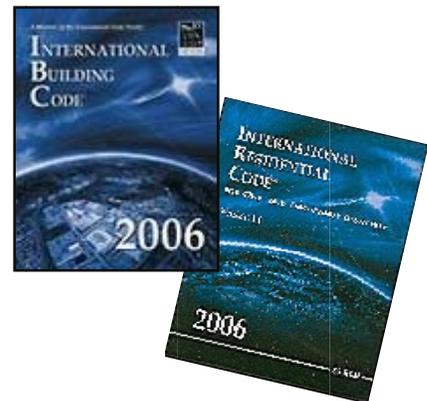
**Goodhue County Building Permit Applications** for the unincorporated township areas are available at the Land Use Management Department Office or they can be downloaded from the Goodhue County Website: [www.co.goodhue.mn.us/departments/landuse/building/index.aspx](http://www.co.goodhue.mn.us/departments/landuse/building/index.aspx).

Your township clerk may have County forms available. You may contact the Land Use Management Department if you would like County applications, forms, or handouts sent to you by mail, by fax, or by email.

## Code References

Minnesota Rules, Chapter 1300, details the scope of the code, addresses general permit-and-inspection requirements, and provides administrative guidelines.

Specific siding requirements can be found in the International Building Code (IBC) and in the International Residential Code (IRC). For non-residential projects, siding provisions are in the *IBC Chapter 14, Exterior Walls*. For residential projects, siding provisions are in the *IRC Chapter 7, Section 703, Exterior Covering*.



## Contractors and Licensing



Relative to state licensing requirements, “siding,” along with soffits, fascia, stucco, painting, gutters, and so on, is considered a “specialty skill” listed under “Exterior Finishing” by the Minnesota Department of Labor and Industry. A contractor that practices only one specialty may be exempted from state contractor licensing requirements. However, a residential siding contractor that also installs doors, windows, or skylights must be licensed as a residential building contractor or as a residential remodeler, because that work is listed in a different specialty category.

Property Owners may do work on their own property, including siding installations, without state licensing, as long as they are not engaged in speculation projects.

Minnesota-licensed residential building contractors and Minnesota-licensed residential remodelers may perform specialty work including siding installations. For additional information on state contractor licensing requirements, visit the Department of Labor and Industry, Construction Codes and Licensing Website at [www.dli.mn.gov/CCLD/RBCWho.asp](http://www.dli.mn.gov/CCLD/RBCWho.asp).

## Siding Manufacturer’s

There are many types of siding products on the market. Siding products include wood shakes and shingles, plaster, stone and masonry. EIFS (exterior insulation finish systems), fiber cement, steel, vinyl, aluminum, and fiberglass. Generally, siding products are required to be tested, certified, and properly labeled as conforming to a specific standard. In addition to the general code requirements, all types of siding installations should be done to **comply with the manufacturer’s specifications and requirements**.



## **General Requirements**

The general requirement for exterior coverings (siding) is that the exterior wall must provide a **weather-resistant wall envelope**. The wall envelope must include properly-installed **flashing**. The wall envelope must be designed and constructed to prevent the accumulation of water within the wall assembly by use of a **water-resistant barrier** behind that exterior veneer. The wall envelope must also have a means of draining to the exterior any water that enters the assembly.



**Water-Resistive Barrier.** With few exceptions, Number 15 asphalt felt or an approved water-resistive barrier must be applied over studs or sheathing of all exterior walls. The approved barrier must be continuous to the top of the walls. It must be applied horizontally and lapped shingle-fashion not less than 2 inches. Where there are joints, a six-inch lap is required. (IRC 703.2)



**Flashing.** Approved corrosion-resistant flashing must be installed shingle-fashion to prevent the entry of water into the wall assembly or into the building structural framing components. (IRC 703.8)

Flashing is required:

- Under and at the ends of copings and sills;
- Continuously above projecting wood trim;
- At attachments of porches, decks, and stairs;
- At intersections of walls with roofs;
- At meeting lines (other than vertical) of exterior materials;
- At intersections of walls and roofs with chimneys and other projections;
- At built-in gutters;
- Where kick-out diversion is required; and
- At exterior openings of doors and windows;

**Flashing** is an approved corrosion-resistant material provided in such a manner as to deflect and resist entry of water into the construction assembly.

**Fasteners.** Siding must be securely attached with aluminum, stainless steel, zinc-coated, or other approved corrosion-resistant fasteners in accordance with Table 703.4. In areas of high wind, additional fastening requirements may apply. (IRC 703.4)

**Penetrations.** Any penetrations of the exterior wall assembly must be caulked or otherwise sealed appropriately to prevent water intrusion.



## **Inspections**

Installation of the water-resistive barrier and of the flashing, as well as of the siding itself, should be verified and documented by inspections. Multiple inspections are needed:

- Inspection of the water-resistive barrier;
- Inspection of properly-installed flashing;
- Inspection of siding during installation (shows fastening); and
- A final inspection.

Siding installers should call for the required inspections. Inspections are typically scheduled for the next working day.

**To schedule an inspection, please call 651/385-3114.**

For most projects, in lieu of interrupting the job and delaying project completion, Goodhue County will accept installer-provided photographs of water-resistive barrier installations and of installed flashing. If the installer intends to provide such photographs, the photographs must clearly show proper installation of the approved water-resistive barrier and of the flashing applied at each required location.

Whether photos are used or not, please call to schedule at least two inspections, one inspection of the work in progress and a final inspection at projection completion.

## **Related Considerations**

**Electrical Attachments.** Electrical equipment and devices mounted on the exterior of a structure are normally removed and reinstalled or replaced in conjunction with siding projects. An individual doing this electrical work must be properly licensed (or otherwise registered) with the state. An exception to this is for a homeowner who is personally and physically doing the electrical work on a single-family, detached home that the homeowner both owns and occupies. Electrical work is required to be inspected. In Goodhue County, call the State Electrical Inspector, Doug Sparby, at 651/388-2409.

**Moisture and Ventilation and Combustion Air.** New siding can alter the amount of air infiltration that effects how the structure functions as a system. When more than 50-percent of the exterior walls are re-sided, the Minnesota Energy Code (N1102.6.1) requires combustion air be supplied per the Minnesota Mechanical Code (Minnesota Rules Chapter 1346) unless one of the following conditions applies:

- The building has carbon monoxide alarms that comply with MNSS 299F.50 and 299F.51;
- The building appliances for space heating and for water heating are all either direct vent or electric;
- All vented appliances are documented to be functioning within the parameters of the *Worst Case Draft Test* procedure that is performed according to the Minnesota Department of Commerce Weatherization Field Guide;
- A depressurization test is performed and meets the parameters of CGSB Standard 51.71; or
- A successful safety inspection per *Appendix D* of the 2006 International Fuel Gas Code is performed on each natural draft water and space heating appliance.

## Siding Attachment Schedule | Table R703.4

\*Important Footnotes to the Table are Located on the Next Page.

**WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS**

SIDING MATERIAL		NOMINAL THICKNES <sup>a</sup> (inches)	JOINT TREATMENT	WATER-RESISTIVE BARRIER REQUIRED	TYPE OF SUPPORTS FOR THE SIDING MATERIAL AND FASTENERS <sup>b,c,d</sup>					
					Wood or wood structural panel sheathing	Fiberboard sheathing into stud	Gypsum sheathing into stud	Foam plastic sheathing into stud	Direct to studs	Number or spacing of fasteners
Horizontal aluminum <sup>e</sup>	Without insulation	0.019 <sup>f</sup>	Lap	Yes	0.120 nail 1 1/2" long	0.120 nail 2" long	0.120 nail 2" long	0.120 nail <sup>g</sup>	Not allowed	Same as stud spacing
		0.024	Lap	Yes	0.120 nail 1 1/2" long	0.120 nail 2" long	0.120 nail 2" long	0.120 nail <sup>g</sup>	Not allowed	
	With insulation	0.019	Lap	Yes	0.120 nail 1 1/2" long	0.120 nail 2 1/2" long	0.120 nail 2 1/2" long	0.120 nail <sup>g</sup>	0.120 nail 1 1/2" long	
Brick veneer <sup>z</sup> Concrete masonry veneer <sup>z</sup>		2 2	Section R703	Yes (Note 1)	See Section R703 and Figure R703.7 <sup>h</sup>					
Hardboard <sup>k</sup> Panel siding-vertical		7/16	—	Yes	Note n	Note n	Note n	Note n	Note n	6" panel edges 12" inter. sup. <sup>o</sup>
Hardboard <sup>k</sup> Lap-siding-horizontal		7/16	Note q	Yes	Note p	Note p	Note p	Note p	Note p	Same as stud spacing 2 per bearing
Steel <sup>h</sup>		29 ga.	Lap	Yes	0.113 nail 1 3/4" Staple-1 3/4"	0.113 nail 2 3/4" Staple-2 1/2"	0.113 nail 2 1/2" Staple-2 1/4"	0.113 nail <sup>g</sup> Staple <sup>v</sup>	Not allowed	Same as stud spacing
Stone veneer		2	Section R703	Yes (Note 1)	See Section R703 and Figure R703.7 <sup>h</sup>					
Particleboard panels		3/8 - 1/2	—	Yes	6d box nail (2" x 0.099")	6d box nail (2" x 0.099")	6d box nail (2" x 0.099")	box nail <sup>y</sup>	6d box nail (2" x 0.099"), 3/8 not allowed	6" panel edge, 12" inter. sup.
		5/8	—	Yes	6d box nail (2" x 0.099")	8d box nail (2 1/2" x 0.113")	8d box nail (2 1/2" x 0.113")	box nail <sup>y</sup>	6d box nail (2" x 0.099")	
Plywood panel <sup>i</sup> (exterior grade)		3/8	—	Yes	0.099 nail-2"	0.113 nail-2 1/2"	0.099 nail-2"	0.113 nail <sup>g</sup>	0.099 nail-2"	6" on edges, 12" inter. sup.
Vinyl siding <sup>m</sup>		0.035	Lap	Yes	0.120 nail 1 1/2" Staple-1 3/4"	0.120 nail 2" Staple-2 1/2"	0.120 nail 2" Staple-2 1/2"	0.120 nail <sup>g</sup> Staple <sup>v</sup>	Not allowed	Same as stud spacing
Wood <sup>j</sup> rustic, drop		3/8 Min	Lap	Yes	Fastener penetration into stud-1"				0.113 nail-2 1/2" Staple-2"	Face nailing up to 6" widths, 1 nail per bearing; 8" widths and over, 2 nails per bearing
Shiplap		19/32 Average	Lap	Yes						
Bevel		7/16	Lap	Yes						
Butt tip		3/16	Lap	Yes						
Fiber cement panel siding <sup>f</sup>		5/16	Note s	Yes Note x	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l,y</sup>	4d corrosion-resistant nail <sup>u</sup>	6" o.c. on edges, 12" o.c. on intermed. studs
Fiber cement lap siding <sup>f</sup>		5/16	Note v	Yes Note x	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l</sup>	6d corrosion-resistant nail <sup>l,y</sup>	6d corrosion-resistant nail <sup>w</sup>	Note w

For SI: 1 inch = 25.4 mm.

\*Important Footnotes are Located on the Next Page.

## Important Footnotes to Table R703.4

### Footnotes to Table R703.4

- a. Based on stud spacing of 10 inches on center where studs are spaced 24 inches, siding shall be applied to sheathing approved for that spacing.
- b. Nail is a general description and shall be T-head, modified round head, or round head with smooth or deformed shanks.
- c. Staples shall have a minimum crown width of  $7/16$ -inch outside diameter and be manufactured of minimum 16 gage wire.
- d. Nails or staples shall be aluminum, galvanized, or rust-preventative coated and shall be driven into the studs for fiberboard or gypsum backing.
- e. Aluminum nails shall be used to attach aluminum siding.
- f. Aluminum (0.019 inch) shall be unbacked only when the maximum panel width is 10 inches and the maximum flat area is 8 inches. The tolerance for aluminum siding shall be  $\pm 0.002$  inch of the nominal dimension.
- g. All attachments shall be coated with a corrosion-resistant coating.
- h. Shall be of approved type.
- i. Three-eighths-inch plywood shall not be applied directly to studs spaced more than 16 inches on center when long dimension is parallel to studs. Plywood  $1/2$ -inch or thinner shall not be applied directly to studs spaced more than 24 inches on center. The stud spacing shall not exceed the panel span rating provided by the manufacturer unless the panels are installed with the face grain perpendicular to the studs or over sheathing approved for that stud spacing.
- j. Wood board sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches on center. Nails shall penetrate  $1/2$  inches into studs, studs and wood sheathing combined, or blocking. A weather-resistant membrane shall be installed weatherboard fashion under the vertical siding unless the siding boards are lapped or battens are used.
- k. Hardboard siding shall comply with AHA A135.6.
- l. For masonry veneer, a weather-resistant sheathing paper is not required over a sheathing that performs as a weather-resistant barrier when a 1-inch air space is provided between the veneer and the sheathing. When the 1-inch space is filled with mortar, a weather-resistant sheathing paper is required over studs or sheathing.
- m. Vinyl siding shall comply with ASTM D 3679.
- n. Minimum shank diameter of 0.092 inch, minimum head diameter of 0.225 inch, and nail length must accommodate sheathing and penetrate framing  $1/2$  inches.
- o. When used to resist shear forces, the spacing must be 4 inches at panel edges and 8 inches on interior supports.
- p. Minimum shank diameter of 0.099 inch, minimum head diameter of 0.240 inch, and nail length must accommodate sheathing and penetrate framing  $1/2$  inches.
- q. Vertical end joints shall occur at studs and shall be covered with a joint cover or shall be caulked.
- r. Fiber cement siding shall comply with the requirements of ASTM C 1186.
- s. See Section R703.10.1.
- t. Minimum 0.102" smooth shank, 0.255" round head.
- u. Minimum 0.099" smooth shank, 0.250" round head.
- v. See Section R703.10.2.
- w. Face nailing: 2 nails at each stud. Concealed nailing: one 11 gage  $1/2$  galv. roofing nail (0.371" head diameter, 0.120" shank) or 6d galv. box nail at each stud.
- x. See Section R703.2 exceptions.
- y. Minimum nail length must accommodate sheathing and penetrate framing  $1/2$  inches.
- z. Adhered masonry veneer shall comply with the requirements in Sections 6.1 and 6.3 of ACI 530/ASCE 5/TMS-402.

**651/385-3114 | Remember to Call for Inspections! | 651/385-3114**