GUARD RAILING ON RETAINING WALLS

Guards and Window Fall Protection - Section R312 IRC 2012

R312.1 Guards.

Guards shall be provided in accordance with sections R312.11 through R312.1.4.

R312.1.1 Where required.

Guard shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a guard.

R312.1.2 Height.

Required guards at open-sided walking surfaces including stairs, porches, balconies or landings, shall not be less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line of connecting the leading edges of the treads.

No requirements were found in the New York State uniform building code for guards or railings on retaining walls.

713.1f Handrails and Railings: addresses stairs are steps of more than three risers; window openings on stairs and landings and well openings; and landings, platforms and porches more than 18 inches above the adjacent floor grade level. There is no mention of retaining walls.

803.8 Freestanding Retaining Walls: addresses structural matters only and makes no mention of railings.

CLEARANCE BETWEEN SIDING AND ROOF SURFACE

Vinyl Siding: The Vinyl Siding Institute (http://www.vinylsiding.org) Minimum 1/2 inch clearance between the vinyl siding trim and roofing materials where walls meet the roof. Makes flashing visible; permits the thermal expansion and contraction of the siding materials; and helps prevent distortion of the bottom channel due to heat conducted from shingles.

Generally per NACHI: "In both headwall and sidewall conditions, unless the exterior wall is brick, you should see a gap of at least 1½ inches between the bottom of the exterior wall-covering material and the top of the roof-covering material." https://www.nachi.org/flashing-part2-13.htm

MORE ON ROOF KICK-OUT FLASHING

(https://www.jameshardiepros.com/getattachment/32d18236-ec6a-4dff-8ef0-8d28c59448e2/introtools-hz5-ca-en.pdf)

Caution: The kickout flashing shall be min. 4 in x 4 in as required by IRC code R905.2.8.3 and be angled between 100° - 110° to deflect water from dumping behind the siding and the end of the roof intersection





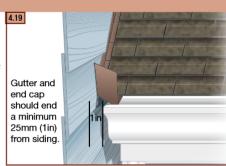
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Polypropylene pre-form kickout flashing by Dryflekt

GUTTERS

If gutters are installed, they should not terminate against siding or trim. Maintain a 25mm (1 in) clearance between the siding and the gutter end-cap. Kickout flashings should be installed on the roof above to divert roof runoff into the gutters and away from the 25mm (1 in) gap.

The amount of water that can be generated from a rain shower or storm can be substantial. Managing the collection and distribution of this water is important over the life of a home.



More on siding clearance from the web:

Other siding types i.e. "Hardie Plank" concrete composition siding, and "Maibec" wood siding require 2" clearance from roofing material and open steps, patios or decks. Covered decks/steps have less clearance requirement – see the links for more details

Maibec siding installation requirements:

https://www.maibec.com/imports/medias/pdf/en/installation-guide/maibec-installation-guide-regular-siding-us.pdf

13. DORMER/ROOF JUNCTION FINISH DETAILS The siding must end at least 2" from adjacent roof surfaces. This spacing is necessary to properly drain water and prevent the build-up of ice against the siding. Be sure to nail the first course of siding in place as shown [FIGURE 27]. **ROOF** THOURE 27 2" SPACING ROOF** CLADDING

Continues.....

"Hardie Plank" in colder zones [our region] clearance requirements:

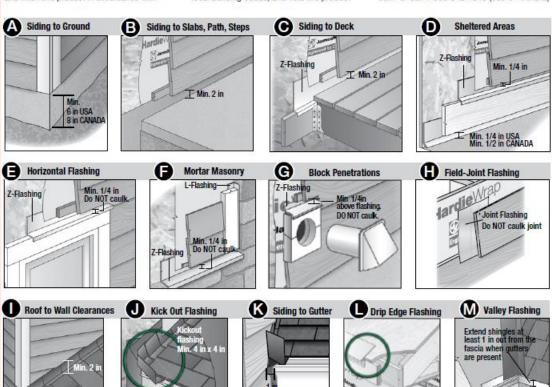
https://www.jameshardiepros.com/getattachment/46fa4739-1b01-4a44-8273-caad3da8f73d/quick-start-hz5-us-en.pdf



zones 1-5

IMPORTANT: This document is not intended to take the place of James Hardie published installation instructions. Failure to install and finish this product in accordance with

applicable building codes and James Hardie published instructions may lead to personal injury, affect system performance, violate local building codes, and void the product only warranty. For the latest set of complete installation instructions applicable to your jobsite location, visit www.HardieInstallation. com or call 1-866-942-7343 (866-9-HARDIE)



IMPORTANT FASTENING INFORMATION: James Hardie® siding, trim and soffit products must be installed in a manner that meets local building code and wind load requirements. It is the responsibility of the installer, builder, architect or other building professional and the home or property owner to ensure the fasteners and fastening schedules used result in an installation that is code compliant.

Consult ESR 1844 and ESR 2290 or other applicable, local code compliance documentation for guidance on fastener selection and placement to achieve design wind loads for the specific James Hardie siding product, framing type, building height, wind exposure category and other factors relevant to your project.

For special circumstances outside the scope of these documents, please refer to the Technical Document library at www.jameshardie.com or contact James Hardie's Technical Services at 1-888-J-HARDIE (1-888-542-7343).

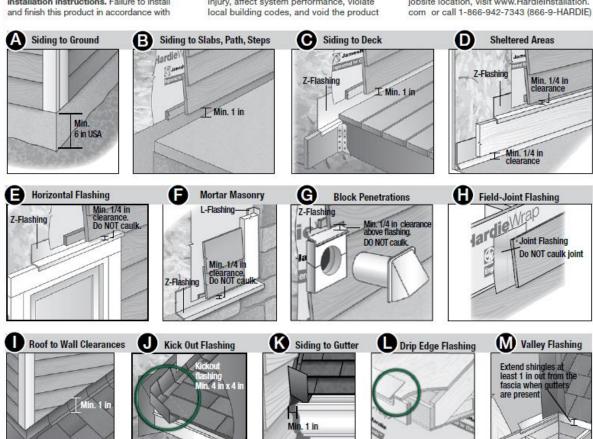
Hardie Plank in warmer zones clearance requirements:

https://www.jameshardiepros.com/getattachment/287eff74-8c7d-4a34-b51e-03a7bd3a6a62/quick-start-hz10-us-en.pdf



zones 6-10

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