Headers for windows and doors are typically supported by cripples or jack studs. These studs can be eliminated using header hangers, as allowed under the International Residential Code.

Eliminating unnecessary wood framing within walls can increase the thermal efficiency of the wall system. Less framing allows more insulation to be installed, and eliminates hot and cold spots (from thermal bridging through the frame) within the wall system.

Jack studs, or trimmers, that support headers around windows can be eliminated through the use of an approved framing anchor (“header hanger”) attached to the full-height wall stud and to the header. 2006 and 2009 IRC Table R502.5(1); Footnote “d” allows the use of header hangers based on the following parameters:
• ground snow load
• building width
• number of floors and roof assemblies supported
• size of the header material
• span of the header

Wood structural panel box headers are limited to a span of no greater than four feet if using a header hanger per 2006 and 2009 IRC Figure 602.7.2.

Plan Review

1. Verify the number of floors and roof ceiling assemblies that are being supported by the header per Table R502.5(1).
2. Verify that the building width (perpendicular to the ridge) is not greater than that shown in Table R502.5(1).
3. Verify that the span of each window opening where a header hanger is proposed is not greater than the value shown in Table R502.5(1).
4. Verify that the proposed header hanger to be used in the project has an ICC Evaluation Services report.

Field Inspection

1. Verify that the span of the opening is not greater than shown on the building plans.
2. Verify that the header material is #2 grade lumber or better.
3. Verify that the header hanger is properly nailed, per the manufacturer’s instructions.

Code Citations*

IRC 2006 and 2009, Table R502.5(1) Girder Spans and Header Spans for Exterior Bearing Walls

Footnote d. NJ: Number of jack studs required to support each end. Where the number of required jack studs equals one, the headers are permitted to be supported by an approved framing anchor attached to the full-height wall stud and to the header.

References

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