



## Technical Bulletin FC/FMF 2025-01

### First Release:

July 17, 2025

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### Applicable Standards:

FORTIFIED Commercial™—Hurricane  
FORTIFIED Commercial™ - High Wind  
FORTIFIED Multifamily™—Hurricane  
FORTIFIED Multifamily™ - High Wind

### Applicable Designation Level:



## FORTIFIED Requirements for Cement and Clay Hip and Ridge Tile Installed Over Asphalt Shingle Roof Cover

### Overview

This technical bulletin addresses roof-to-wall connections in wood framing for FORTIFIED Commercial & Multifamily projects, with a particular focus on toe-nail connections. Toe-nail connections are widely used in wood framing, but they are highly installation-dependent. Even slight deviations in the angle of the nails can significantly reduce their intended capacity, compromising the overall strength of the connection. Additionally, improper installation of toe-nails can cause splitting in the wood framing, which further diminishes the structural integrity and uplift capacity of the connection.

### Requirement

Toe-nailed only connections are not acceptable for roof to wall connections. Acceptable connections may be metal strap/tie connectors that adequately transfer vertical load from the roof members to the wall members below (i.e., straps/connectors must be connected to both plies of double top plates with additional straps to wall studs as needed on the interior or attached to sheathing on the exterior). Alternative acceptable connections may be through-bolt or screw connections with sufficient embedment to connect through both plies of the wall top plate, with additional straps to wall studs below as needed on the interior or attached to sheathing on the exterior.

### Additional References

For additional guidance, refer to the following:

- [2025 FORTIFIED Commercial Standard](#)
- [2025 FORTIFIED Multifamily Standard](#)
- [FORTIFIED Legal Disclaimer](#)

