F0 Less Than 73 mph.

Some damage to chimneys; branches broken off trees; shallow-rooted trees pushed over; sign boards damaged.

F1 74 – 112 mph.

Peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos blown off roads.

F2 113-157 mph.

Roofs torn off frame houses; mobile homes demolished; boxcars overturned; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.

F3 158 – 206 mph.

Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off the ground and thrown.

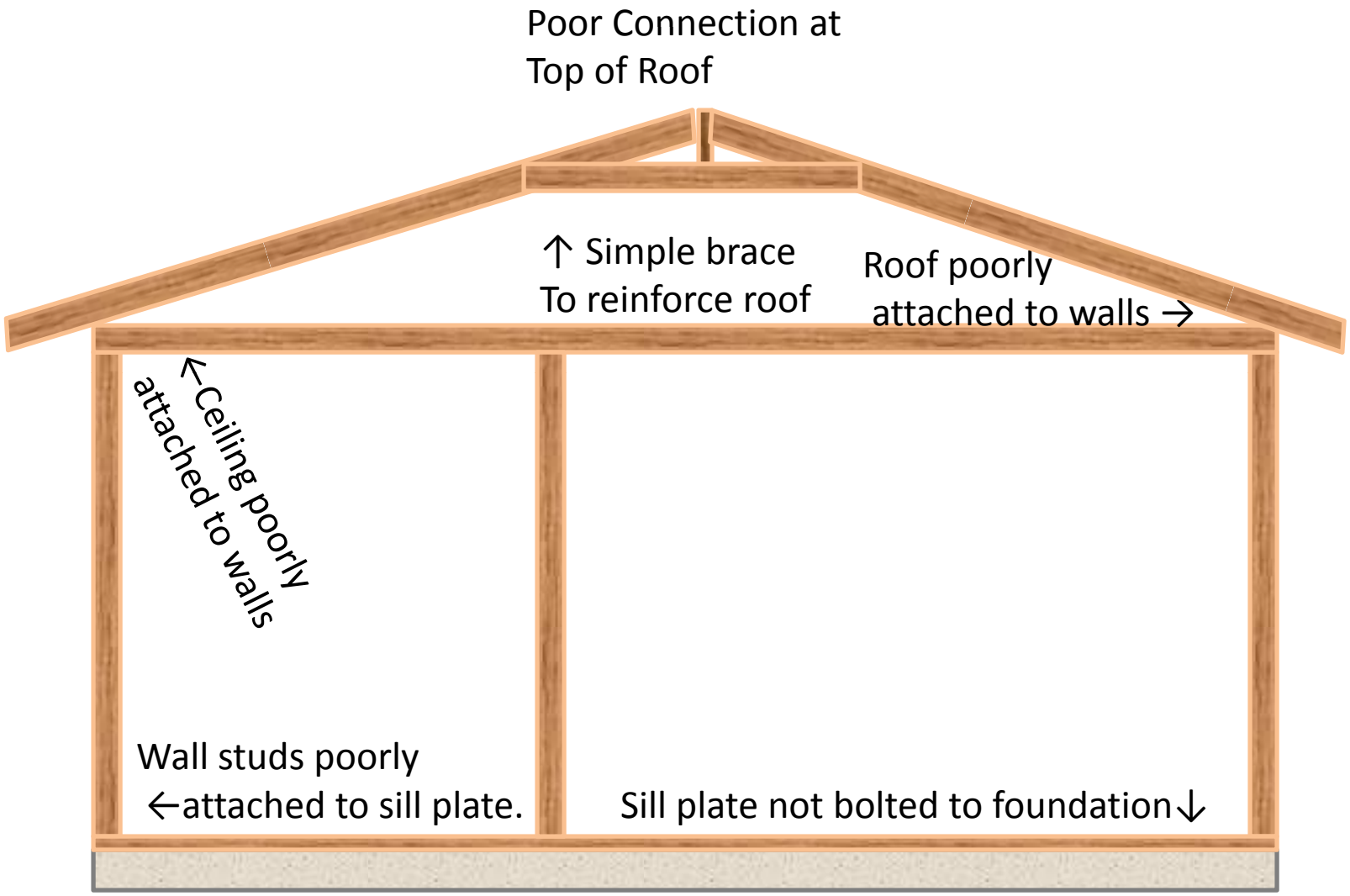
F4 -207 – 260 mph.

Well-constructed houses leveled; structures with weak foundations blown away some distance; cars thrown and large missiles generated.

F5 261 – 318 mph.

Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 meters (109 yds); trees debarked; incredible phenomena will occur**.**

Common Weak Points in Home Construction

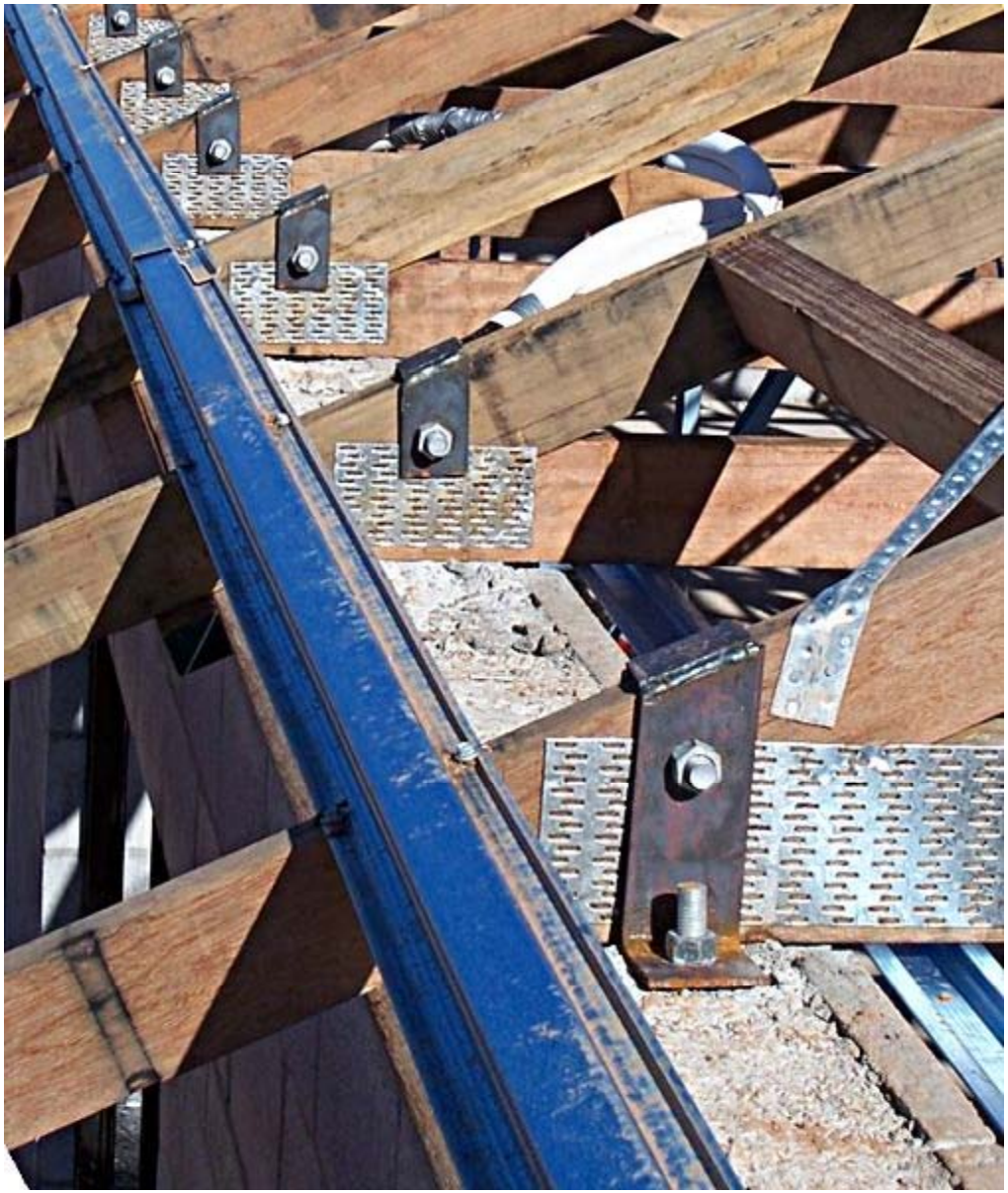


Threaded Bolts Hold Sill Plate to Foundation

Hooked Rebar Holds House to Foundation

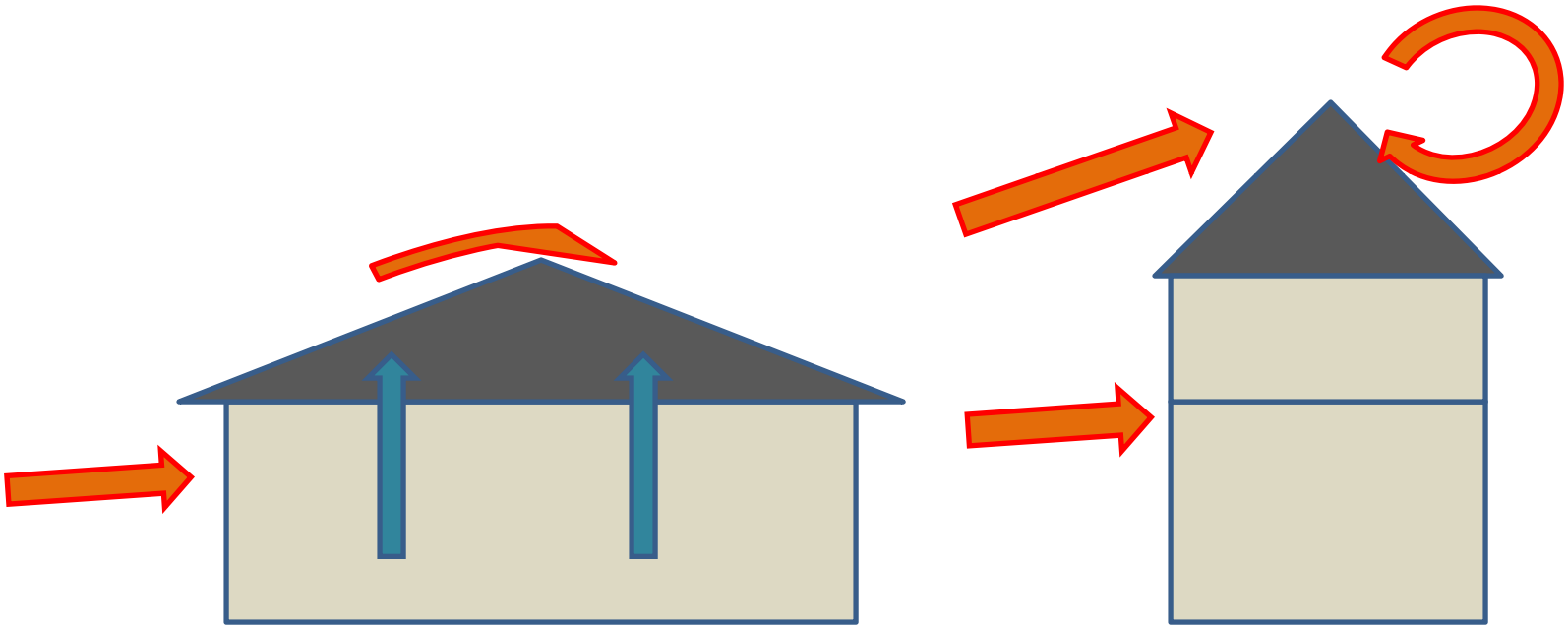
Hurricane Straps and Plates

Heavy Duty Bolted Hurricane Straps



The Yurt of Mongolia
Is Designed to Deflect Wind

Modern Ranch Style House with Low Pitch Roof
Can act as Air Foil and Lift Off House
Old Fashioned Steep Roof Can Disrupt Air Flow,
But Presents More Surface Area



NASA Drawing of Microburst
Outflowing Air Is Opposite of Tornado

Sequence Leading to Airplane Crash Due to Microburst