

Structural Support Bracket

Not part of the NFPA 13 Hanger Assembly

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We get many technical questions regarding code and standard jurisdiction for the structural support bracket. The answer is both the building code and NFPA 13 for different reasons.

In defining the Structural Support Bracket or SSB, we should note that it is commonly used to provide fire sprinkler system support in building systems which use a hybrid wood roof structure. The SSB provides an approved point of building structural attachment for hanger mounting that corresponds to the fire sprinkler routing locations for cross mains and bulk mains. The fire sprinkler contractor provides system pipe location and identifies specifics regarding its weight. When the SSB is provided the fire sprinkler contractor is required to mount the fire sprinkler hangers to it.

NFPA 13 jurisdiction for the SSB is limited to performance specification. The bracket is designed for installed sprinkler hanger load at $1wt + 250$ lbs. NFPA 13 considers the SSB as part of the structural roof assembly and not part of the fire sprinkler hanger assembly. Accordingly, the SSB is not a listed hanger component per NFPA 13. Further, the mounting of the SSB bracket to the building structure is beyond the purview of NFPA 13 or the fire sprinkler contractor.

The SSB is within the jurisdiction of the building code as a structural component. Thus, the fire sprinkler contractor has no direct input regarding SSB engineering or design. The Structural Engineer of Record provides the SSB material specification, including its method of attachment to the structure. Then, the roof contractor provides and installs the SSB bracket corresponding to the geometry of the fire sprinkler system.

Occasionally, AHJ's request a position statement regarding "Alternate Methods and Means" per NFPA 13. This article should be used to alleviate that requirement.



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