



MASTER SHEET METAL, INC.

1648 AUIKI STREET HONOLULU, HI 96819 / TELEPHONE 847-2128 / FAX 847-2131 /  
msm@hawaii.rr.com

## BULDING CODE VIOLATIONS

*What it can mean to your company.*

It's important that roofing professionals comply with building codes. A construction contractor whose work is not consistent with the building code in the jurisdiction where the work was performed may face civil liability for negligence, as well as contractual liability.

If a contract states that a contractor shall be responsible for constructing work in accordance with the building code, the contractor can be liable for breach of contract and resulting damages if there is a building code violation. General contractors' subcontract forms frequently impose a specific contractual obligation upon subcontractors to make sure their work adheres to applicable building codes. If a code violation was inherent in the plans and specifications given to the contractor or subcontractor, the contractor may be able to assert a claim for indemnification and contribution against the design professional or other parties who prepared the plans and specifications.

**Even in the absence of a specific contract provision, a contractor is likely to face claims if his work violates the applicable building code. This is particularly relevant in re-roofing situations when there is no design specification.**

In most states, a building code violation is considered to be evidence of negligence. In some situations, a building code violation may be considered negligence per se. This means the contractor, for all practical purposes, has no defense to a negligence claim based on a code violation. Some states have enacted statutes stating that persons who have been injured as a result of a building code violation are entitled to bring claims against the party responsible for the code violation.

The International Building Code's (IBC's) 2003 and 2006 editions contain a provision that low-slope roof systems' edge metal flashing (coping, fascias and grave-stops) must be specifically tested and designed to resist wind loads according to the ANSI/SPRI ES-1 standard. ANSI/SPRI ES-1 was developed by SPRI (Single Ply Roofing Institute) using and American National Standards Institute (ANSI) based consensus process as a method for using wind loads in general compliance with ASCE 7, Minimum Design Loads for Buildings and Other Structures.

To comply with IBC's provision for edge securement for low-slope roofs, edge metal flashing **must be tested** and shown to stay in place when subjected to design wind loads. This is a significant departure from what has been standard industry practice where edge metal flashings usually were designed based on established guidelines or dictated by regional practices. The IBC's provision is particularly onerous for designers who specify edge metal flashings or contractors who fabricate their own sheet metal edge flashing.

Simply stated, a roof edge system must act as a water seal at the edge by protecting the membrane from pulling free under high winds or repeated seasonal wind cycles. If the edge leaks or blows off, damage to the roof membrane, insulation and/or the structural decking can occur.

Compromising any portion of an edge metal specification greatly diminishes the useful life expectancy of the entire roof system. There is little or no monetary recourse to a building owner when damage occurs due to the builder accepting a shop-fabricated roof edge system that may not perform as required, in lieu of the specified products.

The following are conservative estimates regarding the cost of the litigation versus the cost of the roof edge:

- The cost of a building's roof is approximately 10% of the total building cost
- Conservatively, 60% of litigation claims originated from the roof area
- On average, 59% of roof warranty claims are attributed to the edge metal failure
- Therefore, out of all the litigations, 36% is attributed to the edge metal failure
- Perimeter edge metal is typically 0.1% of the building cost
- 0.1% of the cost of the building carries 36% of the exposure to risk of litigation

Despite this, many specified edge metal products are routinely eliminated or substituted with inferior products due to cost overruns, contractor convenience or misguided information. This is an unnecessary risk that can easily be avoided by properly specifying (and holding to that specification) a quality, tested roof edge.