

## GG248-14

### 807.2.2 (New)

**Proponent:** Martha VanGeem, representing self (martha.vangeem@gmail.com)

**Add new text as follows:**

**807.2.2 (New) Exterior sound transmission.** The building envelope for those portions of buildings that contain Group B, I or R occupancies and are located within 1000 feet of limited access expressways shall comply with both of the following:

1. Exterior wall and roof-ceiling assemblies shall be constructed with a sound transmission class (STC) rating of not less than 50 or an apparent sound transmission class (ASTC) of not less than 45
2. Fenestration shall not be single pane.

**Reason:** Controlling noise that enters a building space improves indoor comfort and can increase occupant productivity. This added section requires the same level of resistance to sound in terms of sound transmission coefficient (STC) for building assemblies as required in the IBC for separation of dwelling units (Section 1207).

Rather than specify an STC of at least 30 for fenestration, not allowing single pane glazing has been specified. They are essentially equivalent requirements, however, "fenestration that is not single pane" is easier to enforce.

One of the biggest short-comings in green buildings is noise. As stated in an article in [Buildings](#), entitled "Green Noise" (K. Roy, October 25, 2012), "...according to ongoing research at the Center for the Built Environment (CBE), it [acoustical comfort] is the lowest performing IEQ factor in green buildings. Moreover, in all buildings surveyed, the level of acoustic satisfaction was rated as the lowest performance IEQ factor, and the only negative (dissatisfaction) factor overall."

People generally value an environment with less noise and will often pay a premium for it.

**Bibliography:**

*Buildings*, "Green Noise", K. Roy, October 25, 2012,  
[http://www.buildings.com/DesktopModules/BB\\_ArticleMax/ArticleDetail/BBArticleDetailPrint.aspx?ArticleID=14836&Template=Standard\\_Print.ascx&siteID=1](http://www.buildings.com/DesktopModules/BB_ArticleMax/ArticleDetail/BBArticleDetailPrint.aspx?ArticleID=14836&Template=Standard_Print.ascx&siteID=1)

**Cost Impact:** Will increase the cost of construction

GG248-14 : 807.2.2 (NEW)-VANGEEM1055