

STC Rating of a wall assembly insulated with ecocell[®] batt insulation.

Building codes have, for many years, referenced minimum Sound Transmission Classification (STC) ratings for walls and floor/ceiling assemblies in apartments, condominiums, hospitals and hotels. STC is simply a measure of how well building partitions (walls and floor/ceiling assemblies) attenuate sound as it moves through those partitions. The higher the STC, the better the assembly is at controlling sound. Most building codes specify a minimum STC of 50 for walls and floor/ceiling assemblies in apartments and condominiums, as well as other buildings. The proposed International Green Construction Code (IGCC) requires the same minimum STC 50.

Achieving an STC 50 with simple 2X4 wall construction is rare. Increased wall thickness (such as additional layers of gypsum board) or additional materials (such as resilient channel) are typically needed to reach STC 50.

That is not the case when using ECOCELL[®] batts. A simple 2X4 wall containing ECOCELL[®] batts achieves an STC 50, as tested at Riverbank Acoustical Laboratories, without adding cost to the construction.

The ECOCELL[®] wall represents a cost-saving approach for builders and consumers demanding higher acoustical performance with a simple wall assembly using an environmentally friendly, green insulation.

Testing done with a full scale assembly at Riverbank Acoustical Laboratories.

The diagram and stated STC rating listed below is intended to serve as a guide. Construction practices have an influence on final STC ratings. Cellulose Material Solutions, LLC (CMS) cannot guarantee actual STC ratings. Flanking sound patterns, the integrity of the wall, and floor and ceiling construction are important factors in effective sound control.

For more information, please contact the CMS technical department at +888 968 9877.

STEEL STUD ASSEMBLY

50 Single steel studs 24" o.c.; single layer 5/8" type "x" gypsum board each side; ECOCELL[®] 3 1/2" thick batt.

