

Sound Tests 07

Bright Ideas in Concrete Building Systems & Services

## STC (Sound Transmission Class) and IIC (Impact Isolation Class) Field Tests of Typical Lite-Deck Floors

## FIELD TEST I – Conducted May 21, 2007 Garage Floor – Single Family Residence Sioux City, Iowa

Drawing not to scale Standard Concrete,4,000 psi mix Reinforcing Steel not shown Dim. of receiving room below: 29' X 40' Weight of floor: 74.4 lbs. per sq. ft.

FSTC\*

57

FIIC\*\* 44

\*Field Sound Transmission Class
\*\* Field Impact Isolation Class

Calculated Results

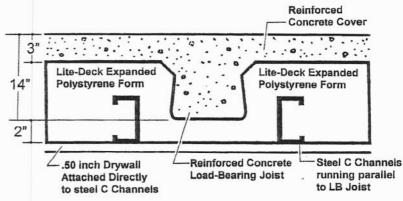
Attach Drywall

with Resilient Clips

FSTC

FIIC

67 61 Lite-Deck Floor Configuration



Attach 1" Drywall direct to C Channels

54 48

## FIELD TEST II – Conducted May 22, 2007 Bedroom Floor – Single Family Residence Sioux City, Iowa

Drawing not to scale Standard Concrete, 4,000 psi mix Reinforcing Steel not shown Dim. of receiving room below: 12' X 16' Weight of floor: 60.2 lbs. per sq. ft.

FSTC\*

**FSTC** 

FIIC

48

FIIC\*\* 82
\*Field Sound Transmission Class

\*\* Field Impact Isolation Class

Calculated Results

Attach Drywall

with Resilient Clips

56 90 Attach 1" Drywall direct to C Channels

52 86

Field Tests were conducted and certified by Wm. H.O. Kroll Associates of Minnetonka, MN. The firm specializes in acoustics – sound, noise and vibration. The test results are identified as FSTC and FIIC as required for tests made in the field as opposed to tests made in a commercial acoustical test facility. Tests were made in keeping with ASTM E366 and E1007 standards. Room temperatures were 68-degrees (dry bulb) and 48-degrees (wet bulb). Both receiving rooms met the room volume minima, as called for in the ASTM standards. Complete copies of Field Tests available upon request.

## Lite-Deck Floor Configuration

