

LITE-DECK®

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

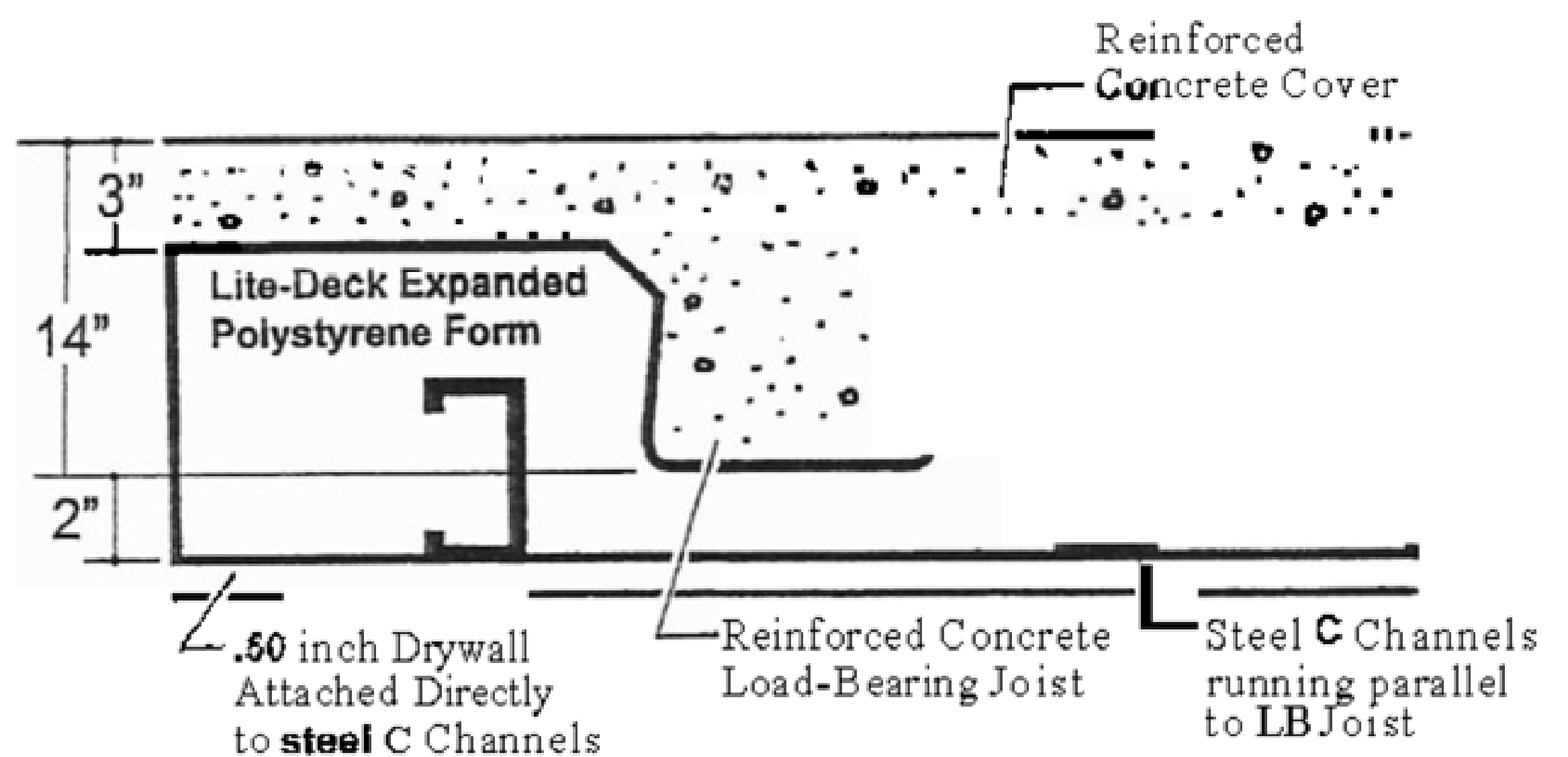
Sioux City, Iowa

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

Lite-Deck Floor Configuration



Calculated Results	Attach Drywall with Resilient Clips	Attach 1" Drywall direct to C Channels
FSTC	67	54
FIIC	61	48

FIELD TEST II – Conducted May 22, 2007

Bedroom Floor – Single Family Residence

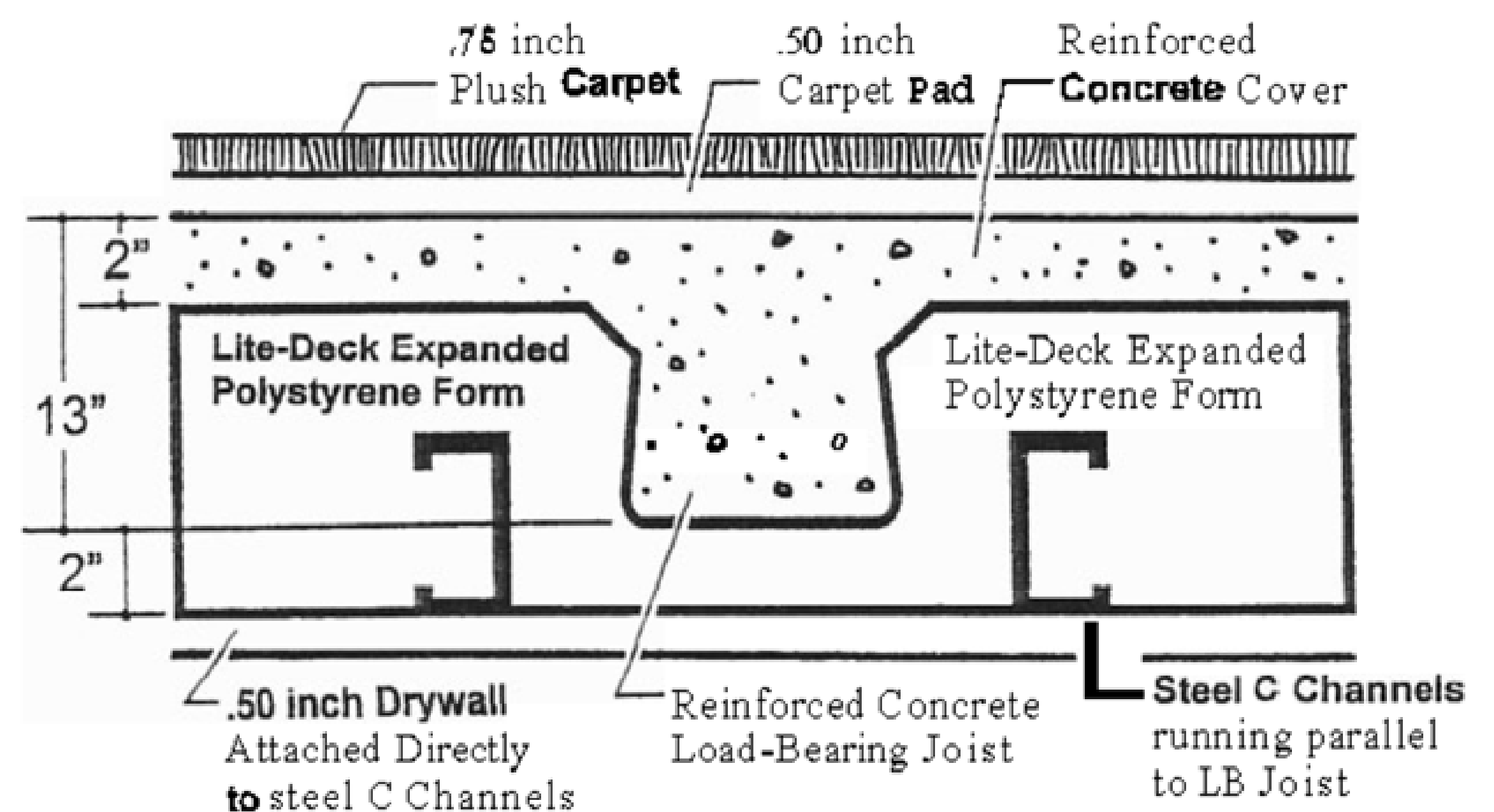
Sioux City, Iowa

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* **48**
FIIC** **82**

*Field Sound Transmission Class
** Field Impact Isolation Class

Lite-Deck Floor Configuration



Calculated Results	Attach Drywall with Resilient Clips	Attach 1" Drywall direct to C Channels
FSTC	56	52
FIIC	90	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.