

# Evidence of Performance

## Airborne sound insulation of a cable penetration



Test report 164 44278e

This is a translation of the test report 164 44278/ dated 10. December 2010

Client **Hilti Entwicklungsgesellschaft  
mbH**  
Hiltistrasse 6  
  
86916 Kaufering  
Germany

Basis  
ETAG N° 026 Part 2:2008-01  
EN ISO 140-1:1997+A1:2004  
EN 20140-3 :1995+A1:2004  
EN 20140-10 : 1992  
EN ISO 717-1 : 1996+A1:2006  
Additional:  
ASTM E 90-04  
ASTM E 413-04

Product	cable penetration assembly 2" and 4" in wall opening
Designation	Hilti Firestop sleeve CP 653 CFS-SL-S
Construction	Profiled metal tube with internal membrane
External dimensions	2" and 4" diameter
	Double metal stud partition wall with two layers
Wall construction	plasterboard

### Informations for use

This test report may be used to validate the sound insulation of a fire safety board on basis of ETAG 026, Part 2, clause 2.4.9

### Validity

The data and results given relate solely to the described, tested object.

Testing the acoustic properties does not allow any statement to be made on further characteristics of the present structure which could define performance and quality.

Weighted normalized level difference of small building elements  $D_{n,e,w}$   
Spectrum adaptation terms C and  $C_{tr}$



Cable penetration assembly 2"  
 $D_{n,e,w} (C; C_{tr}) = 53 (-2;-3) \text{ dB}$

Cable penetration assembly 4"  
 $D_{n,e,w} (C; C_{tr}) = 47 (-3;-5) \text{ dB}$

The lowest measured value is stated.

### Notes on publication

The ift Guidance Sheet "Conditions and Guidance for the use of ift Test Documents" applies.

The cover sheet can be used as a summary.

ift Rosenheim  
2 March 2011

Dr. Joachim Hessinger, Dipl.-Phys.  
Head of Testing Department  
Building Physics

Bernd Saß, Dipl.-Ing. (FH)  
Deputy Head of Testing Department  
Building Physics

### Contents

This test report includes  
14 pages

- 1 Test specimen
  - 2 Test procedure
  - 3 Test results
  - 4 Instructions for use
- Data sheet (5 pages)