

**Sound Transmission Class Testing (ASTM E90)**

**INTRODUCTION:**

This report presents the results of acoustical testing of Hilti’s CP-653 Speed Sleeve. This testing was requested by Mr. Chad D. Stroike, CFPS and was completed on July 29<sup>th</sup>, 2014

This report must not be reproduced except in full with the approval of Element Materials Technology. The test results contained in this report pertain only to the specific assemblies tested and not necessarily to all similar constructions.

The results stated in this report represent only the specific construction and acoustical conditions present at the time of the test. Measurements performed in accordance with this standard on nominally identical constructions and acoustical conditions may produce different results.

**TEST RESULTS SUMMARY:**

	<b><u>STC</u></b>	<b><u>def</u></b>	<b><u>OITC</u></b>
Test 1: Control Wall #1/ Baseline	<b>60</b>	<b>27</b>	<b>49</b>
Test 2: Control Wall #1 with CP-653 2” Speed Sleeve With Smoke Gaskets in the Closed Position	<b>44</b>	<b>14</b>	<b>45</b>
Test 3: Control Wall #1 with CP-653 2” Speed Sleeve With Smoke Gaskets. Wire Bundle Installed and Sleeve Closed	<b>47</b>	<b>18</b>	<b>46</b>
Test 4: Control Wall #1 with CP-653 4” Speed Sleeve With Smoke Gaskets in the Closed Position	<b>43</b>	<b>29</b>	<b>42</b>
Test 5: Control Wall #1 with CP-653 4” Speed Sleeve With Smoke Gaskets. Wire Bundle Installed and Closed	<b>48</b>	<b>25</b>	<b>46</b>

**TEST RESULTS SUMMARY (continued):**

	<b><u>STC</u></b>	<b><u>def</u></b>	<b><u>OITC</u></b>
Test 9: Control Wall #2/Baseline	<b>61</b>	<b>26</b>	<b>48</b>
Test 10: Control Wall #2 with CP-653 2" Speed Sleeve With Smoke Gaskets in the Closed Position	<b>41</b>	<b>13</b>	<b>42</b>
Test 11: Control Wall #2 with CP-653 2" Speed Sleeve With Smoke Gaskets with Wire Bundle and Closed	<b>50</b>	<b>24</b>	<b>45</b>
Test 12: Control Wall #2 with CP-653 4" Speed Sleeve With Smoke Gaskets in the Closed Position	<b>42</b>	<b>23</b>	<b>41</b>
Test 13: Control Wall with CP-653 4" Speed Sleeve With Smoke Gaskets Wire Bundle Insatalled and Closed	<b>49</b>	<b>27</b>	<b>44</b>

Tabular and graphical presentations of the data are presented under "TEST RESULTS" below. Individual wall constructions are listed below.