

## Sound Transmission Class Testing (ASTM E90)

### INTRODUCTION:

This report presents the results of acoustical testing of Hilti's CP-680 Cast In Firestop Device. This testing was requested by Mr. Chad D. Stroike, CFPS and was completed on March 14, 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:

	<u>STC</u>	<u>def</u>	<u>OITC</u>
Test 1: Control Wall / Baseline	<b>55</b>	<b>30</b>	<b>42</b>
Test 2: Control Wall with CP-680 6" Precast Device and 6" PVC Pipe	<b>56</b>	<b>28</b>	<b>40</b>
Test 3: Control Wall with CP-680 6" Precast Device and 6" Steel Pipe	<b>56</b>	<b>28</b>	<b>44</b>
Test 4: Control Wall with CP-680 4" Precast Device and 4" PVC Pipe	<b>54</b>	<b>25</b>	<b>44</b>
Test 5: Control Wall with CP-680 4" Precast Device and 4" Steel Pipe	<b>55</b>	<b>25</b>	<b>44</b>
Test 6: Control Wall with CP-680 3" Precast Device and 3" PVC Pipe	<b>55</b>	<b>28</b>	<b>44</b>
Test 7: Control Wall with CP-680 3" Precast Device and 3" Steel Pipe	<b>55</b>	<b>30</b>	<b>41</b>

**TEST RESULTS SUMMARY (continued):**

	<b><u>STC</u></b>	<b><u>def</u></b>	<b><u>OITC</u></b>
Test 8: Control Wall with CP-680 2" Precast Device and 2" PVC Pipe	<b>54</b>	<b>27</b>	<b>42</b>
Test 9: Control Wall with CP-680 2" Precast Device and 2" Steel Pipe	<b>54</b>	<b>25</b>	<b>43</b>
Test 10: Control Wall with CP-680 2" Precast Device and 1 1/2" PVC Pipe	<b>55</b>	<b>31</b>	<b>42</b>
Test 11: Control Wall with CP-680 2" Precast Device and 1 1/2" Steel Pipe	<b>54</b>	<b>29</b>	<b>44</b>
Test 16: Control Wall with CP-680 2" Precast Device and 1/2" Pipe wrapped in Fiberglass Insulation	<b>55</b>	<b>23</b>	<b>45</b>
Test 17: Control Wall with CP-680 2" Precast Device and 2" Wire Bundle	<b>53</b>	<b>30</b>	<b>44</b>

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