



# Sound Control Underlayment Troubleshooting Guide TDS 206

## 170 Sound & Crack Isolation Mat

Complaint	Cause(s)	Prevention
Cracked Tiles/ Grout	<ol style="list-style-type: none"> <li>1. Deflection of suspended slab</li> <li>2. Lack of movement joints</li> <li>3. Movement or settlement of substrate</li> </ol>	<ol style="list-style-type: none"> <li>1. Substrate deflection rating of L/360 must be met to accept tile and sound control mortar. Substrate deflection rating of L/480 must be met to accept stone and sound control mortar.</li> <li>2. Follow Tile Council of North America (TCNA) Detail EJ-171 for recommendation of placement of movement joints. Isolate perimeter of installation and all restraining surfaces with foam expansion spacers.</li> <li>3. Ensure that construct meets industry guidelines.</li> </ol>
Loose or Hollow Sounding Tile or Stone	<ol style="list-style-type: none"> <li>1. Deflection of suspended slab</li> <li>2. Lack of movement joints</li> <li>3. Sound control underlayment not installed properly</li> <li>4. Substrate surface not cleaned</li> <li>5. Subjected to stress prior to recommended cure time</li> </ol>	<ol style="list-style-type: none"> <li>1. Substrate deflection rating of L/360 must be met to accept tile and sound control mortar. Substrate deflection rating of L/480 must be met to accept stone and sound control mortar.</li> <li>2. Follow TCNA Detail EJ-171 for recommendation of placement of movement joints. Isolate perimeter of installation and all restraining surfaces with foam expansion spacers.</li> <li>3. Install 170 Sound &amp; Crack Isolation Mat per installation instructions on DS 170.0.</li> <li>4. Substrate must be free of contamination (e.g. sealers, curing compounds, coatings, oil, paint, dirt and dust). Clean contaminants from surface by sandblasting, shot-blasting, water blasting, bush hammer, machine grinding or other means of scarification. Chemical cleaning is not recommended.</li> <li>5. Allow sufficient time for sound control mortar to set firm prior to opening to traffic or use. Isolate perimeter of installation and all restraining surfaces with foam expansion spacers.</li> </ol>
Tiles Tenting	<ol style="list-style-type: none"> <li>1. Improper movement joint design</li> </ol>	<ol style="list-style-type: none"> <li>1. Follow TCNA Detail EJ-171 for recommendation of placement of movement joints. Isolate perimeter of installation and all restraining surfaces with foam expansion spacers.</li> </ol>
Sound Ratings Not Met	<ol style="list-style-type: none"> <li>1. Lack of perimeter isolation</li> <li>2. Floor structure is not adequate</li> </ol>	<ol style="list-style-type: none"> <li>1. Isolate perimeter of installation and all restraining surfaces with foam expansion spacers.</li> <li>2. IIC rating of floor structure (e.g. concrete) is not high enough to attain necessary IIC rating of entire assembly. For example, <math>\Delta</math>IIC of 170 Sound &amp; Crack Isolation Mat is 20; if an IIC of 50 is required, the floor structure must achieve a minimum IIC rating of 30.</li> </ol>

Technical Data Sheets are subject to change without notice. For latest revision, check our website at [www.laticrete.com](http://www.laticrete.com)  
TDS 206.doc R 28 August 2013



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