Wenger Modular Music Practice Rooms
Vs.
Built-in Construction

Cost Comparison Project

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The following is a summary of a cost comparison project undertaken by Wenger Corporation to determine the cost difference between Wenger Modular Music Practice Rooms and properly constructed stick-built music practice rooms.

Two projects were selected at random from previously quoted project activity at Wenger Corporation. One was selected to represent current high school construction; the other to represent current collegiate Schools of Music construction.

Sets of drawings and specifications were provided to an independent architectural firm for cost estimating. The practice room’s acoustic performance was evaluated and modifications for improvement were recommended.

The Wenger cost estimates include the cost of delivery and installation.

Projects

1. Belvidere Elementary & High School
   Belvidere, IL
   Secondary School Music Practice Room
   4 Music Practice Rooms

   This project included four music practice rooms. The estimated construction costs for the stick-built rooms include enhanced construction to achieve the same level of acoustic performance in sound isolation guaranteed with the Wenger practice room. These enhancements include the following:
   
   • Extending walls to the roof deck and sealing penetrations
   • Using “double-wall” construction with staggered studs and two layers of gypsum board
   • Providing sound-isolation doors with an STC of 46 or better.

   **Stick-Built Construction Cost Estimate:**
   - With improved acoustical performance = $148,024

   **Wenger Modular practice Rooms Cost Estimate:**
   - With same acoustical performance = $103,392
2. Central Washington University Music Education Facility  
   Ellensburg, WA  
   Collegiate School of Music  
   7 Music Practice Rooms

This project consisted of adding seven music practice rooms for percussion practice. This type of music practice demands a high level of sound isolation. The initial plan included some provisions for acoustic considerations, such as the use of masonry separation walls in the university facility. This construction is included in the cost estimates. However, additional construction enhancements similar to those included in the Belvidere High School project are also included in the total estimate.

**Stick-Built Construction Cost Estimate:**
- With improved acoustical performance = $399,160

**Wenger Modular practice Rooms Cost Estimate:**
- With same acoustical performance = $364,010

*Note: As stated in the architectural report summary, construction costs were determined through using RS Means Cost Construction Data, 2011 Edition. In addition, a Regional Multiplier was used (which is published annually) that adjusts these estimates to the region in which each project resides.*
## Stick-Built Construction vs. Pre-engineered Rooms

<table>
<thead>
<tr>
<th>Stick Built</th>
<th>Attributes</th>
<th>Wenger</th>
<th>Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor Built</td>
<td>No guarantee of sound isolation – student/owner complaints.</td>
<td>Pre-engineered</td>
<td>Guaranteed sound isolation.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Multiple trades to oversee and review. Work difficult to supervise.</td>
<td>Pre-engineered</td>
<td>One manufacturer to deliver and install everything. Simplified scheduling/control.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>No flexibility as music programs change.</td>
<td>Pre-engineered</td>
<td>Schools own the rooms and can be moved or changed easily. Protects taxpayer's interest.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Labor and trades must be scheduled. Time line depends on many subcontractors, could result in delays.</td>
<td>Pre-engineered</td>
<td>Quick installation: Can be installed late in the project and still meet deadlines.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Painted surfaces: may be long lasting, depending on materials used. Requires regular maintenance and ongoing costs.</td>
<td>Pre-engineered</td>
<td>Durable electrostatic powder painted surfaces for long-lasting finishes that require little maintenance saving labor cost over time.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Door window glazing usually 1 sq. Ft. or less, single pain. Potential for sound leakage.</td>
<td>Pre-engineered</td>
<td>Full door window (12.6 sq. ft.) for improved security and monitoring. Acoustically designed to contain sound.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>No upgrades for use of technology, limits use of room.</td>
<td>Pre-engineered</td>
<td>Design allows for adding VAE integrated learning technology at later date.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Acoustical treatments must be designed and added to room surfaces, no real guarantees of acoustical performance.</td>
<td>Pre-engineered</td>
<td>Interior acoustic treatment integrated into the room. Protected from damage.</td>
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</tr>
<tr>
<td>Contractor Built</td>
<td>Permanent room construction. Labor costs transferred to future projects.</td>
<td>Pre-engineered</td>
<td>Rooms can relocated and the existing area used for other needs without costly demolition and time.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>Rooms must be isolated for HVAC with individually lined take-off branches. Higher cost.</td>
<td>Pre-engineered</td>
<td>Sound-attenuating ventilation panels built-in for direct connection to building’s HVAC system.</td>
</tr>
<tr>
<td>Contractor Built</td>
<td>No guarantee of using “sustainable” or green products for practice room.</td>
<td>Pre-engineered</td>
<td>Wenger practice room is GreenGuard certified.</td>
</tr>
</tbody>
</table>