Owens Corning offers full consultation services to assist with the preparation of details, specifications and pricing.

**TECHNICAL SERVICES:**

QuietZone® Acoustical Batts are available at commercial resellers across Canada. For any additional information on availability or cost please contact the regional technical sales representative.

**AVAILABILITY AND COST:**

Owens Corning technical services distributes a number of technical bulletins to assist with the preparation of details, specifications and product selection.

**RELATED REFERENCES:**

For more information call 1-800-GET-PINK® or visit www.owenscorning.com
Performance Advantage: QuietZone® Acoustical Batt insulation offers:

- Superior STC acoustic properties in comparison to higher density materials like rock/dag/wool and other mineral fibre insulations in walls
- High moisture resistance, water repellent and vapour permeable
- Non-combustible
- UL/CUL Labeled
- Certified for carrying the ECOLOGO®
- Chemically inert
- Non-corrosive
- Non-deteriorating
- Vermic proof
- Manufactured across Canada

Basic Use:

Noise control and noise reduction are critical to the success of every industrial, Commercial and Institutional (ICI) project.

QuietZone® Acoustical Batt Insulation is the most effective and widely specified mineral fiber glass batt insulation for ICI and commercial multi-family acoustic applications. The information provided in this literature is for Canadian architects, engineers, specification authorities and professional acoustic contractors who must meet the Building Code standards.

STC-50 Canadian Code requirements may be exceeded by specifying and installing QuietZone® Acoustical Batt Insulation using assembly details and correct tested STC values from National Research Council Canada (NRC) Report IRC-IR-693. QuietZone® Acoustic Batts are ideally suited for lightweight steel framing (LFS), applications and wood stud wall applications. The NRC-CNRC Summary Reports for Consortium (walls & floors) should be consulted for accurate and up-to-date documentation of the performance of assemblies including spacing of studs, fasteners, insulation selection, fire and sound resistance of gypsum board systems and sound transmission results.

The report states, “some published STC data are obsolete or suspect. Building products and test methods have changed, so old tests and estimates are potentially misleading”. The NRC-CNRC Consortium Reports (IRC-IR-693) with over 250 wall assemblies) and IRC-IR-766 (with over 100 floor assemblies) applied to this obsolete data. “The increased sound insulation required in the 1990 National Building Code highlighted the shortage of reliable acoustic data for walls with STC over 50”. Internationally recognized acoustical laboratories in the USA publish acoustical test data for Owens Corning and other companies, but it should be noted that Riverbank (RAL) and Graniteville Acoustic Laboratory (W & DC) STC data testing represent individual assembly tests. The individual assembly tests are not necessarily representative of common construction practices, nor are they as reproducible and consistent as the comprehensive integrated NRC consortium test program carried out in National Research Council Canada’s laboratory.

Composition and Materials:

Codes require an STC rating of 50 as a minimum acceptable value and STC 55 in specific areas. QuietZone® unfaced, friction fit, PINK® Fiber Glass mineral fibre batts provide designers and acoustic contractors with the best absorptive materials available for acoustic applications. QuietZone® Acoustical Batt insulation, for combustible and non-combustible construction, are composed of preformed inorganic fibres and bonded with thermosetting resin to control density and thickness, conforming to the higher Noise Reduction Coefficients and Rayles sound absorption values, on average lighter density Quietzone® Acoustical Batts have equivalent STC, sound transmission class ratings in gypsum board finished steel and wood stud walls and floor systems in building code tables.

Limitations:

QuietZone® Acoustical Batt Insulation perform a sound absorption function and are not used to address thermal requirements.

Concrete Block Walls:

Due to the changing lifestyle i.e. condominium living, designers prefer to design for STC 55 or more as end users demand higher quality living environments.

Typically 38mm thick Quietzone® Acoustical Batts are used for noise control with masonry/block party walls with 38mm x 38mm (2” x 2”) wood strapping or 40mm steel 2”furring or in 40mm steel stud partitions.
THEME: Mineral Fibre Thermal Insulation for Buildings (Type 1 - unfaced)

**COMPLIANCE & PERFORMANCE**

The sound transmission loss of a wall is increased by adding QuietZone® low-density PINK® Fiber Glass as cavity fill. QuietZone® Acoustical Batt insulation is an especially economical insulation, offering equivalent or higher STC values compared to the more difficult to install higher density rock wool batts. Independent test show adding unnecessary density to the sound absorbing material in the cavity has no value or effect on the STC values of walls. The National Research Council of Canada, Summary Report for Canusmart on Gypsum Board Walls: Sound Transmission Results; IRC-IR-693 shows that the thickness of the sound absorbing material is the most important consideration in raising the acoustical effectiveness of the wall assembly.

**TECHNICAL DATA**

**IMPROVING THE EFFECTIVE SOUND TRANSMISSION LOSS OF WALL CONSTRUCTIONS:**

STC values greater than > 50, as required by the National Building Code of Canada (NBC), are achieved by specifying the correct thickness of QuietZone® Acoustical Batt Insulation. Additional information on specific rated wall assemblies; may be found in Owens Corning Acoustical Wall Insulation Design Guide. Canadian Designers should use and specify STC results based on NRC Report IRC-IR-693, April 1995; or as adopted in the provincial and National Building Code of Canada.

Good building practice recommendations encourage STC 55 values and higher as end users have demonstrated a willingness to pay for performance and higher quality wall assemblies.

**WHY QUIETZONE® ACOUSTICAL BATT:**

- Recommended wherever optimum acoustic efficiency is critical, to meet building code STC requirements in retrofit and new construction applications.
- Underwriters’ Laboratories labelled, suitable for non-combustible construction.
- The Specified Fire Resistance Rating Technical support available across Canada.
- Water repellent and does not permit horizontal capillary transmission in wall assemblies.
- Manufactured across Canada. Available in the dimensions and thicknesses as required for quick installation.
- Cost advantages compared to other materials used to control and absorb unwanted noise.
- Preferred by professional contractors across North America – lightweight, unfaced, resilient, friction fit glass fibre batts; for ease of installation and cutting.
- High tensile strength, friction-fit batts resisting settling, displacement and vibration forces.
- Will not cause corrosion of metal studs and unaffected by temperature/humidity changes.

**SIZE & AVAILABILITY:**

****Acoustical Batts available across Canada. More than 4x per truckload.****

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Width</th>
<th>Area per truck.</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lightweight Steel Framing</td>
<td>38mm</td>
<td>1.5</td>
<td>406</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.5</td>
<td>610</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>2.5</td>
<td>610</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>2.5</td>
<td>606</td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>3.5</td>
<td>406</td>
</tr>
<tr>
<td></td>
<td>89</td>
<td>3.5</td>
<td>610</td>
</tr>
<tr>
<td>Wood Framing</td>
<td>65</td>
<td>3.5</td>
<td>381</td>
</tr>
</tbody>
</table>

**NOTE:**

* Acoustical Batts are especially manufactured for noise control and recover to their designed thickness after installation, providing the best possible reduction of the travel of sound through wall insulation within a range of densities from the lightest to the lightest (38mm to 2.5 kg/m³) for cavity insulation, show there is no difference in the sound transmission properties.

**CAN/ULC-5702-97**

**COMPLIANCE & PERFORMANCE**

Mineral Fibre Thermal Insulation for Buildings (Type 1 - unfaced)

**CAN/ULC-S114-M80**

Determination of Non-Combustibility (non-combustible)

**ASTM E 413, E 492**

Sound Transmission Classification Method (STC for assemblies)

**ASTM E 84**

Surface Burning Characteristics Method (flame spread (FS), smoke developed (SD1))

**ASTM E 90**

Airborne Sound Transmision Loss Method (TL at frequencies for assemblies)

**ASTM E 492**

Impact Sound Transmission Method (IEC for floor assemblies)

**ULC Listing**

List of Equipment & Materials (Building Materials: 30 to 60 lb/ft³) (S102 FS – 20, SD – 20)

**C-UL-US Listing**

UL Building Materials Directory (BKN777R3674) (IHC 25/50)

**CAN/ULC S129-M86**

Smoke Resistance Method (complies)

**NBFCC**


**ASTM C 1104**

Dimensional Stability Will not shrink or warp (less than 0.1%)

**CAN/ULC-S101-M82**

Fire Rated Assemblies Method (acceptable component)*

**National Building Code of Canada**

**INSULATION & MATTING**

- Lightweight, unfaced, resilient, friction fit glass fibre batts, for ease of handling, transport and storage.

**DIMENSIONAL STABILITY**

- Will not cause corrosion of metal studs and unaffected by temperature/humidity changes.

**EASIER INSTALLATION VIS A VIS ROCK/SLAG**

- High strength bonded glass fibre batts do not require fasteners to prevent sagging.

**PRODUCT PERFORMANCE**

- Superior to the lowest density rock/slag mineral wool insulation for improved workmanship and acoustical performance.

**PRODUCT TYPICAL USE**

- Universal and proven application methods for the control of sound on commercial projects.

**PRODUCT AVAILABILITY**

- Extensively tested by many independent accredited laboratories with documented product history.

- Products may be installed to meet Canadian Building Code requirements and “Best Practice.”

- Tear resistant compression packaged, plus Multi-Packs for ease of handling, transport and storage.

- Available in appropriate thickness across North America for optimized acoustical performance in all frequencies including the mid range and low frequencies.
COMPLIANCE & PERFORMANCE

Owens Corning Canada’s ULC listing on page 35 of ULC List of Equipment and Materials, Building Materials (March 2000), Owens Corning QuietZone® Batt Insulation™ ULC labelling permit glass fibre insulation batts to be installed in ULC Design assemblies where no insulation was tested or required to obtain the specified assembly rating (See Figure 1).

FIRE RESISTANCE WITH QUIETZONE® BATTS:

<table>
<thead>
<tr>
<th>Interior Finishes</th>
<th>Cross Furring</th>
<th>Cavity Filling</th>
<th>25 Gauge S.S. Spacing</th>
<th>STC Value</th>
<th>Assembly ID</th>
<th>Fire Rating</th>
<th>Assembly ID (ULC-W#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1-2) 1/2&quot; TypX Gyp None 3-1/2&quot; FG Batt 16&quot; o.c. 45 TL-92-426 1 h NLB NBC-S5c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FIRE RESISTANCE WITH QUIETZONE® BATTS: Figure 1

| (1-1) 5/8" TypX Gyp W407++,W415** None None 16" or 24" 38 TL-92-418 1 h NLB W407++,W415** |
| (1-1) 1/2" Std Gyp None 3-1/2" FG Batt 16" o.c. 40 TL-93-365 N.A. N.A. |
| (1-1) 1/2" TypX Gyp None 3-1/2" FG Batt 16" o.c. 46 TL-93-344 45 min NLB W413 |
| (1-1) 5/8" TypX Gyp W407++,W415** None 3-1/2" FG Batt 16" o.c. 49 TL-93-325 1 h NLB |
| (1-1) 1/2" Std Gyp None 3-1/2" FG Batt 24" o.c. 47 TL-92-413 N.A. N.A. |
| (1-1) 1/2" TypX Gyp None 3-1/2" FG Batt 24" o.c. 48 TL-92-410 45 min NLB W413 |
| (1-1) 5/8" TypX Gyp W407++,W415** None 3-1/2" FG Batt 24" o.c. 49 TL-92-399 1 h NLB |
| (1-2) 1/2" Std Gyp None 3-1/2" FG Batt 16" o.c. 46 TL-93-366 N.A. N.A. |
| (1-2) 1/2" TypX Gyp None 3-1/2" FG Batt 16" o.c. 50 TL-92-426 1 h NLB NBC-S5d |
| (1-2) 5/8" TypX Gyp W407++,W415** None 3-1/2" FG Batt 16" o.c. 52 TL-92-420 1 h NLB |
| (1-2) 1/2" Std Gyp None 3-1/2" FG Batt 24" o.c. 51 TL-92-415 N.A. N.A. |
| (1-2) 1/2" TypX Gyp None 3-1/2" FG Batt 24" o.c. 52 TL-92-411 1 h NLB NBC-S5c |
| (1-2) 5/8" TypX Gyp W407++,W415** None 3-1/2" FG Batt 24" o.c. 54 TL-92-368 1 h NLB |
| (2-2) 1/2" TypX Gyp None 3-1/2" FG Batt 16" o.c. 55 TL-92-424 2 h NLB W414++ |
| (2-2) 5/8" TypX Gyp None 3-1/2" FG Batt 16" o.c. 56 TL-92-351 2 h NLB NBC-S5b |

(1) describes a single layer of gypsum board on each side of a stud wall.
(2) describes two layers of gypsum board on each side of a stud wall.

STC tested with 18 Gauge loadbearing steel stud framing.
STC tested with 20 Gauge loadbearing steel stud framing.

NRC RESEARCH COMPARED FIBER GLASS BATT PERFORMANCE TO ROCKWOOL:

All thickness combinations of Mineral Wool (MW) batts with 89mm Fiber Glass (FG) batts (with 1 single layer gypsum each side) gave lower STC assembly performance for MW batts. The greatest lowering (2 to 8 STC units) was for assemblies with a single layer of 5/8" Type X gypsum board on each side of the steel stud assembly. Be sure to specify full thickness FG QuietZone® Acoustical Batt Insulation.

Table A.9.10.3.1.A, Footnote (4) permits a generic range of fibrous sound absorptive materials (including glass fibre) but clearly requires filling of at least 90% of the cavity thickness for the walls to have the listed STC value.

<table>
<thead>
<tr>
<th>FG 89mm</th>
<th>MW (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>48</td>
<td>47</td>
</tr>
<tr>
<td>46</td>
<td>45</td>
</tr>
<tr>
<td>44</td>
<td>41</td>
</tr>
<tr>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
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<tr>
<td>38</td>
<td>38</td>
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<td>36</td>
<td>36</td>
</tr>
<tr>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>


SPECIFICATION NOTE:

Specify full thickness 3-1/2" (89mm) QuietZone® Batt insulation with STC value and Assembly ID from Figure 1 or generically the appropriate Wall Number in the National Building Code of Canada – 1995, Appendix A, Table A.9.10.3.1.A.

Permission documentation is in third sentence of Walls and Partitions section on Page 18 of ULC List of Equipment and Materials, Fire Resistance (March 2000).
All thickness combinations of Mineral Wool batts gave lower STC assembly performances than 89 mm fiber glass batts with only one exception. This chart investigates assemblies with 1-I (two layers one side, one the other) of 5/8” Type X gypsum board. [The greatest lowering (2-8 STC) was for assemblies with a single layer of 5/8” Type X gypsum board on each side of the steel stud assembly.] Be sure to specify full thickness FG QuietZone® Acoustical Batt Insulation.

**NRC RESEARCH COMPARED FIBER GLASS BATT PERFORMANCE TO ROCKWOOL:**

On average QuietZone™ Fiber Glass Batts have equivalent or better STC acoustical performance than nominal equivalent thickness, approximately 265% higher density mineral fibre (rock/slag wool) batts in gypsum board faced steel and wood stud assemblies.*

**NRC SUMMARY REPORT DATA:**

<table>
<thead>
<tr>
<th>Material</th>
<th>Thickness</th>
<th>Average Density (kg/m²)</th>
<th>STC</th>
<th>Assembly ID</th>
<th>Layers</th>
<th>Gyptum (mm)</th>
<th>LSF Stud Space (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiber Glass</td>
<td>65 2.5</td>
<td>&gt;10.5 0.65</td>
<td>39</td>
<td>TL-93-058</td>
<td>I-I</td>
<td>15.9 5/8”</td>
<td>400 16</td>
</tr>
<tr>
<td>Rockwool</td>
<td>65 2.5</td>
<td>&gt;10.5 2.3</td>
<td>37</td>
<td>TL-93-061-039</td>
<td>I-1</td>
<td>15.9 5/8”</td>
<td>400 16</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>65 2.5</td>
<td>&gt;10.5 0.65</td>
<td>44</td>
<td>TL-93-033</td>
<td>I-I</td>
<td>15.9 5/8”</td>
<td>600 24</td>
</tr>
<tr>
<td>Rockwool</td>
<td>65 2.5</td>
<td>&gt;10.5 2.3</td>
<td>42</td>
<td>TL-93-034</td>
<td>I-1</td>
<td>15.9 5/8”</td>
<td>600 24</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>65 2.5</td>
<td>&gt;10.5 0.65</td>
<td>45</td>
<td>TL-93-038</td>
<td>I-I</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
<tr>
<td>Rockwool</td>
<td>65 2.5</td>
<td>&gt;10.5 2.3</td>
<td>43</td>
<td>TL-93-047</td>
<td>I-1</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>65 2.5</td>
<td>&gt;10.5 0.65</td>
<td>51</td>
<td>TL-93-039</td>
<td>I-II</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
<tr>
<td>Rockwool</td>
<td>65 2.5</td>
<td>&gt;10.5 2.3</td>
<td>49</td>
<td>TL-93-055</td>
<td>I-11</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
<tr>
<td>Fiber Glass</td>
<td>65 2.5</td>
<td>&gt;10.5 0.65</td>
<td>55</td>
<td>TL-93-040</td>
<td>I-II</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
<tr>
<td>Rockwool</td>
<td>65 2.5</td>
<td>&gt;10.5 2.3</td>
<td>54</td>
<td>TL-93-056</td>
<td>I-11</td>
<td>12.7 1/2”</td>
<td>600 24</td>
</tr>
</tbody>
</table>

*NRC Research compared 65mm Rockwool Batts with 65mm Fiber Glass Batts in 65mm depth Steel Stud Assembly.National Research Council of Canada, Summary Report, for Consortium on Gypsum Walls: Sound Transmission Results, Internal report IRC-IR-693.

**SPECIFICATION NOTE:**

Specify full thickness 3-1/2” (89mm) QuietZone® Batts with STC value and Assembly ID from Figure II or generically the appropriate Wall Number in the National Building Code of Canada – 1995, Appendix A, Table A.9.10.3.1.A. Table A.9.10.3.1.A, Footnote 5 permits a generic range of fibrous sound absorptive materials (including glass fibre) but clearly requires filling of at least 90% of the cavity thickness for the walls to have the listed STC value.
**INSTALLATION**

**STORAGE:**
Store your insulating materials based on current construction practices in a manner designed to prevent damage. Cover stored materials with protective enclosure if exposed to weather.

If the material becomes wet it should be allowed to dry without becoming compressed. When the insulation dries without becoming compressed the original properties return. Vertically installed PINK® Fiber Glass naturally repels water and resists horizontal wicking.

**HANDLING:**
Insulating materials can be dusty and may cause temporary skin irritation after contact. Always wear goggles and a high quality paper-breathing mask. Wear loose clothing with long sleeves buttoned around your wrists, work gloves, Wash or shower with soap and cool water then follow with warm water to remove the dust. Launder these work clothes separately.

**DELIVERY:**
QuietZone® Acoustical Batts are delivered to the site in a protective tear resistant compression package, plus multi unitized packs for ease of handling and storage.

**PREPARATORY WORK:**
QuietZone® Acoustical Batt Insulation is not difficult to install. Identify interior wall, floor and ceiling areas to receive acoustic treatment with QuietZone®

Install in accordance with written specifications and the Canadian Standard CAN/CSA-A82.31-M91 Gypsum Board Application.

QuietZone® Acoustical Batts are manufactured with extra width to friction fit into steel stud wall assemblies and stay in place without settlement or moving away from the back or the front of studs which may be deeper than the thickness of the insulation batt.**

The batts shall be installed starting at the bottom of framing heights and each following batt is required to be installed firmly above the lower batt. It is standard practice to have a batt splice at each horizontal cross or stiffening brace, which are frequently installed on steel stud framing. The batts are placed between framing members without compressing the insulation significantly. Simply split the batt to install around wiring and utility requirements. Cover the entire wall area without cracks and completely fill the entire cavity space. Install QuietZone® Acoustical Batts in accordance with written specifications and Canadian Standard CAN/CSA-A82.31-M91 Gypsum Board Application.

The room-to-room sound transmission loss where partitions extend to just below suspended ceiling systems can be improved by placing QuietZone® Acoustical Batts on the back of ceiling panels.** Although QuietZone® Acoustical Batts are non-combustible according to CAN/ULC-S114, maintain building electrical, gas and oil safety code required clearances between the insulation and heat emitting devices, such as fuel burning appliances, chimneys, darts and vents (at least 50mm) and recessed light fixtures (at least 75mm).

**REFERENCES**

- See Owens Corning ULC Batt and Blankets Listing in Underwriters Laboratories of Canada List of Equipment and Materials, Volume II (40 U8.3).
- QuietZone® Acoustical Batt Insulation, conform to the non-combustibility requirements of CAN/ULC-S114-M80**

**RECYCLED CONTENT:**
Owens Corning uses more recycled glass than any competitor. Owens Corning PINK® Fiber Glass products comply with the (minimum 35%) cycled content requirements of the Environmental Choice Program and are certified for carrying the ECOLOGO labelling. PINK® Fiber Glass Batts are mainly made from naturally occurring minerals (such as sand) and recycled glass materials.

**REFERENCES FOR FIRE RATING:**

- PINK® Fiber Glass batt products may be used in certain ULC fire rated wall assemblies (examples Figure 1), without detracting from the ratings assigned to these assemblies without any cavity insulation. Fire performance is provided by the gypsum board in these assemblies. Permission documentation for specific component changes are described in third sentence of Walls and Partitions section on Page 18 of ULC List of Equipment and Materials, Fire Resistance (March 2000).

**INSTALLATION:**

QuietZone® Acoustical Batt Insulation is not difficult to install. Identify interior wall, floor and ceiling areas to receive acoustic treatment with QuietZone®

QuietZone® Acoustical Batts significantly improve the Sound Transmission Coefficient (STC) properties of wall and floor assemblies. The actual performance increase is dependent on the total wall assembly construction. See The Owens Corning Acoustic Wall Design Guide for examples of these assemblies and proper installation.

Acoustic tests measure sound transmission loss through wall or ceiling assemblies at a broad range of sound frequencies. The results are processed according to ASTM E 413 rules and sound profiles to provide a single absolute value number. This rating system is necessary to compare wall systems. This absolute value is the Sound Transmission Class (STC).

Owens Corning QuietZone® Acoustical Batts are manufactured with extra width to friction fit into steel stud wall assemblies and stay in place without settlement or moving away from the back or the front of studs which may be deeper than the thickness of the insulation batt.**

The batts shall be installed starting at the bottom of framing heights and each following batt is required to be installed firmly above the lower batt. It is standard practice to have a batt splice at each horizontal cross or stiffening brace, which are frequently installed on steel stud framing. The batts are placed between framing members without compressing the insulation significantly. Simply split the batt to install around wiring and utility requirements. Cover the entire wall area without cracks and completely fill the entire cavity space. Install QuietZone® Acoustical Batts in accordance with written specifications and Canadian Standard CAN/CSA-A82.31-M91 Gypsum Board Application.

The room-to-room sound transmission loss where partitions extend to just below suspended ceiling systems can be improved by placing QuietZone® Acoustical Batts on the back of ceiling panels.** Although QuietZone® Acoustical Batts are non-combustible according to CAN/ULC-S114, maintain building electrical, gas and oil safety code required clearances between the insulation and heat emitting devices, such as fuel burning appliances, chimneys, darts and vents (at least 50mm) and recessed light fixtures (at least 75mm).

**QuietZone® Acoustical Batts are non-combustible. Maintain building electrical, gas and oil safety code required clearances between the insulation and heat emitting devices, such as fuel burning appliances, chimneys, darts and vents to these appliances (at least 50mm) and recessed light fixtures (at least 75mm).**
PART 1 – GENERAL:

1.1 Related Work
1. Section 7213 Batt and Blanket Insulation
2. Section 9010 Metal Support Assemblies
3. Sheet vapour barrier: Section [07/190] [Sheet Vapour Barriers]
4. Insulation for mechanical work: – Section [15200]
5. Heating, Ventilating and Air Conditioning Equipment – Section [15700]
6. Air Distribution – Section [15800]

1.2 References
1. CAN/ULC-S702.97 Thermal Insulation, Mineral fibre, for Buildings
2. CAN/ULC-S102-88 Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies

1.3 Products:

2.1 Acoustical Insulation
1. Owens Corning QuietZone® Acoustical Batts, mineral (glass) fibre; thickness [38mm] [65mm] [89mm], to CAN/ULC-S702-97, Type [1], for all properties other than thermal performance, flame spread 20; smoke developed 20, according to CAN/ULC-S102. Non-combustible according to CAN/ULC-S114.
2. Owens Corning Steel Stud Thermal Insulation, mineral (glass) fibre to CAN/ULC-S702-97, Type [1], thickness [152mm].

2.2 Steel Studs
1. [25 Gauge] [64mm (2-1/2”)] [92mm (3-5/8”)] [152mm (6”)] Steel Studs conforming to CAN/CGSB-7.1, ASTM C 645.
2. [25 Gauge] [64mm (2-1/2”)] [92mm (3-5/8”)] [152mm (6”)] Steel Track conforming to CAN/CGSB-7.1, ASTM C 645.

2.3 Gypsum Wallboard
1. [12.7mm] [15.9mm], Type [X], Gypsum Wallboard as manufactured by [...].

2.4 Steel Resilient Furring Channels

2.5 Acoustical Sealant
1. Owens Corning QuietZone® Acoustic Caulk meeting ASTM C 834 and exceeding performance requirements of ASTM C 920, Class 12.5.

2.6 Accessories
1. Corner Bead, Casing Bead “L” Type: 55mm G90 galvanized sheet metal with perforated flanges
2. Drywall Screws: self-drilling, self-threading Type S, case hardened steel meeting ASTM C 1002. Length recommended by board manufacturer or [ULC] [UL] for each application.
3. Joint Filler: Setting-type joint compound, as recommended by board manufacturer.
4. Joint Tape: 50mm wide perforated paper as recommended by board manufacturer.

PART 2 – PRODUCTS:

2.1 Acoustical Insulation
1. Owens Corning QuietZone® Acoustical Batts, mineral (glass) fibre; thickness [38mm] [65mm] [89mm], to CAN/ULC-S702-97, Type [1], for all properties other than thermal performance, flame spread 20; smoke developed 20, according to CAN/ULC-S102. Non-combustible according to CAN/ULC-S114.
2. Owens Corning Steel Stud Thermal Insulation, mineral (glass) fibre to CAN/ULC-S702-97, Type [1], thickness [152mm].

2.2 Steel Studs
1. [25 Gauge] [64mm (2-1/2”)] [92mm (3-5/8”)] [152mm (6”)] Steel Studs conforming to CAN/CGSB-7.1, ASTM C 645.
2. [25 Gauge] [64mm (2-1/2”)] [92mm (3-5/8”)] [152mm (6”)] Steel Track conforming to CAN/CGSB-7.1, ASTM C 645.

2.3 Gypsum Wallboard
1. [12.7mm] [15.9mm], Type [X], Gypsum Wallboard as manufactured by [...].

PART 3 – EXECUTION:

3.1 Steel Stud Partition Installation
1. The allowable height, gauge and anchoring of steel stud partitions shall be in accordance with engineering shop drawings.
2. Layout partition lines accurately in accordance with drawings, datums, lines and levels.
3. Install floor and ceiling tracks according to partition layout using shield screws, power driven fasteners, or other suitable fasteners at [600mm (24”)] o.c. maximum.
4. Install studs vertically at maximum [400mm (16”)] [600mm (24”)] o.c. and not more than (50mm) from abutting walls, openings and each side of corners.
5. Extend studs to underside of structure where scheduled. Drywall butts unfastened at bottom shall be braced back to construction over at (1000mm) o.c.
6. Set ceiling and floor tracks on acoustical sealant in sound insulated partitions. Where sealant is used in double layer applications, install a bead of sealant under each layer. Ensure continuity of acoustic seal over entire wall including joints between vertical studs, horizontal tracks, surrounding construction and around penetrations.
7. Seal around penetrations in sound-rated walls including joints between dissimilar construction. Use acoustic sealant and/or fire stop system to meet sound and/or fire rating requirements.
8. Install acoustical insulation full width and length between studs to fit snugly without buckling, crazing or gaps. Install lower batt first, upper batt installed to butt with the lower batt and any extra length of insulation trimmed.
9. Install steel resilient furring channels at right angles to floor studs at [400mm (16”)] [600mm (24”)] o.c.

3.2 Ceiling Installation
1. Install acoustic insulation of [89mm (3-1/2”)] thickness, in [single][double][triple] layer to full width and length between floor joists to fit snugly without buckling or gaps.
2. Install steel resilient furring channels at right angles to floor joints at [400mm (16”)] [600mm (24”)] o.c. or.
3. Install acoustic batts over ceiling tiles of suspended ceiling systems over office rooms and adjacent open office areas extending [2400mm (8’)] from office walls.

3.3 Gypsum Wallboard Installation
1. Apply gypsum wallboard panels with [parallel to][perpendicular to] studs according to ULG [UL] [board manufacturer’s recommended] [NRC Assembly No.] [RAL Test No.] [RAL Test No.] design requirements. Position all [edges over studs for parallel application] [ends over studs for perpendicular application]. Use maximum practical lengths to minimize end joints. Fit edges and closely closely, but not forced together. Stagger joints on opposite sides of partitions.
2. Apply [one][two] layer of gypsum wallboard with screw fastener length [mm] [”] and penetration [mm] [”] spaced [mm] [”] o.c. along edge joints and [mm] [”] o.c. in the field.
3. Keep insulation minimum (75mm) from heat emitting devices such as recessed light fixtures, and minimum (50mm) from sidewalls of CAN4-5604 type A chimneys and CAN1-B149.1 and CAN1-B149.2 type B and L vents.
Fiber Glass Insulation Batts

LSF walls may be designed with or without structural sheathing. It is recommended that Owens Corning CodeBord™ Extruded Polystyrene Insulating Sheathing be used on the exterior and the PINK® Thermal Wall Insulation system utilizing fiber glass batts for exterior walls and extruded polystyrene insulating sheathing should be specified to address the thermal requirements of exterior walls.

PINK® Fiber Glass Insulation for Steel Stud Walls is engineered and tested to maximize the value of lightweight steel framing (LSF) methods used in commercial and residential low to high-rise buildings. It is manufactured in dimensions and thickness (RSI values) to suit LSF construction standards.

LSF supports a wide range of interior and exterior finishes and can be easily detailed to maximize acoustical performance and thermal protection.

For maximum thermal performance rigid insulating sheathing is mechanically fastened to the exterior face of the stud wall (without or with structural backup sheathing). Owens Corning CodeBord™ Extruded Polystyrene insulating sheathing will enhance the overall assemblies thermal resistance, addressing thermal bridging and provide dew point control.

Specifications that address thermal performance and the demand for ever greater energy efficiency should request information on Owens Corning’s PINK® Thermal Wall System. The RSI values of PINK® Fiber Glass Insulation for Steel Stud Walls are listed by thickness in the Owens Corning Division 07210 literature. STC values and Fire Resistant Ratings may be found in the Owens Corning Acoustical/Wall Insulation Design Guide or the fire ratings listed by Underwriters Laboratories of Canada List of Equipment & Materials and the National Research Council.

LSF construction is in accordance with Standard CAN/CSA S1 36-94, which establishes Canadian requirements for member design, connections, bracing, fabrication, installation, testing and protection. Additional information on LSF construction may be found in the Lightweight Steel Framing Design Manuals published by the Canadian Sheet Steel Building Institute (CSSBI).

Owens Corning has a full range of PINK® Fiber Glass and Rigid Foam Insulation products developed to meet your exacting standards in design and construction.

www.owenscorning.com I-800-GET-PINK®

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* Masonry wall exterior — Celfort® 200/300 * Concrete sandwich panels — PINKCORE® System * Masonry wall interior — Celfort® 200 Cel-Lok® System * Underslab — Foamular® High Density/Celfort® 300 * Perimeter — Celfort® 300

TO DO THE JOB RIGHT YOU NEED THE RIGHT INSULATION.