Legend

1 Hour Fire Resistance Rating - W605
1. 26 Gauge (0.46mm) (0.018")
   Exterior Cladding
2. U Channel Base
3. Mineral Wool Batt
4. Z Girt
5. Ceramic Fiber Strip Steel
6. 24 Gauge (0.61mm) (0.024")
   Sheet Steel Liner Panel

2 Hour Fire Resistance Rating - W605
1. 24 Gauge (0.61mm) (0.024")
   Exterior Cladding
2. U Channel Base
3. Mineral Wool Batt
4. Z Girt
5. Ceramic Fiber Strip Steel
6. 24 Gauge (0.61mm) (0.024")
   Sheet Steel Liner Panel

The BEHLEN Fireguard is a ULC designated non-load bearing fire wall system designed with sheet steel cladding encolsing a mineral wool insulation that provides a 1 or 2 hour firewall. (Testing has been based on CAN/ULC - @101-M89).

1 Hour Fire Rated Wall Assembly (Per ULC Design No. W605)
• 0.46 mm (0.018") minimum exterior sheet steel wall panel c/w fasteners at 305 mm (12") on centre & lap fasteners at 405 mm (16") on centre
• 0.61 mm (0.024") minimum full height sheet steel liner panel with mastic sealer tape on seam lines and ends, c/w fasteners at 305 mm (12") on centre and lap screws at 305 mm (12") on centre
• Girt spacing of 1220 mm (48") on centre to match mineral wool batt size to a maximum of 1525 mm (60") on centre
• Ceramic fiber strip located on outside of girt face

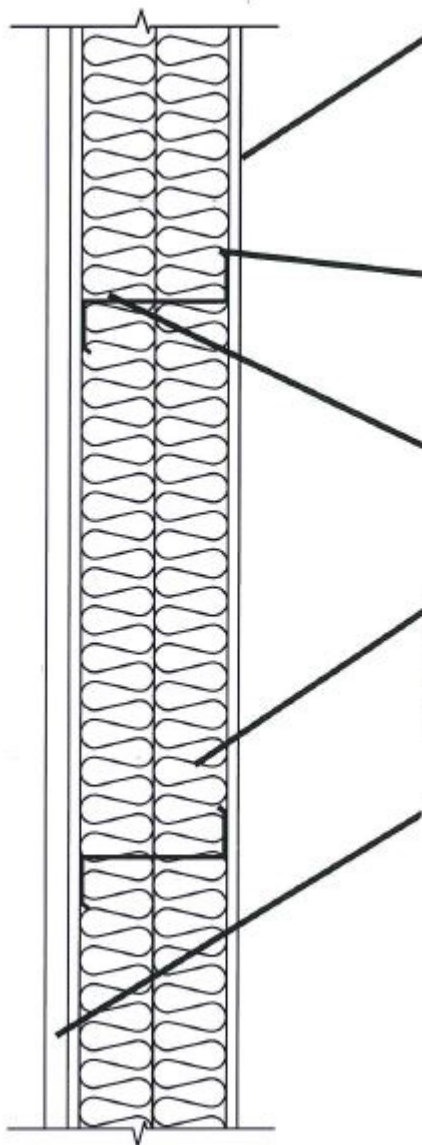**2 Hour Fire Rated Wall Assembly (Per ULC Design No. W606)**
• 0.61 mm (0.024") minimum exterior sheet steel wall panel c/w fasteners at 305 mm (12") on centre & lap screws at 405 mm (16") on centre
• 0.61 mm (0.024") minimum full height sheet steel liner panel with mastic sealer tape on seam lines and ends, c/w fasteners 305 mm (12") on centre and lap screws at 305 mm (12") on centre
• Girt spacing of 1220 mm (48") on centre to match mineral wool batt size to a maximum of 1525 mm (60")
• Ceramic fiber strip located on outside of girt face

Insulated Steel Wall Assembly - Fire-Resistance Ratings 1 and 2 Hour
(Ref. ULC Design #W605 - 1 Hour and Ref. ULC Design #W606 - 2 Hour)

Features:
- Available in variety of colours and profiles unlike cementitious spray-on material that cannot be painted and is messy to apply
- Use on-site tradespeople to install system instead of hiring others (i.e. masonry or drywall contractors)
- Considerably less expensive than other fire rated systems
- Does not require heated space to allow installation

Steel Liner: Panels fabricated from minimum 0.61 mm (0.024") thick sheet fastened to Z-Girts by 19 mm (0.75") long self drilling screws spaced maximum 305 mm (12") on centre. Side lap joints sealed with 3 mm x 13 mm (0.125" x 0.50") field applied selaer tape and secured with 19 mm (0.75") long lap screws maximum 305 mm (12") on centre ends. Splices to be sealed with 3 mm x 13 mm (0.125" x 0.50") field applied sealer tape to form air barrier.

Z-Girt: Minimum 203 mm (8") deep steel Z-Girts with 70 mm (2.75") flanges, 1219 mm (48") on centre to match insulation batt size (Z-Girt may be 254 mm (10") or 305 mm (12") deep depending on bay spacing).

Ceramic Fiber Strip: 128 kg/m^2 density, minimum 100 mm (4") wide x 13 mm (0.50") thick strips, attached to Z-Girt with stick pins spaced 250 mm (10") on centre (not by BEHLEN). Required on all girts and perimeter of framed openings.

Mineral Wool Batts: 96 kg/m^2 nominal density, processed from rock and slag, supplied in sheets 610 mm x 1220 mm (24" x 48"), layers installed with vertical and horizontal joints staggered to fill cavity (not by BEHLEN). Glue layers of insulation together to prevent shifting of batts.

Exterior Cladding: Prepainted sheet steel panels to various profiles and widths, panels minimum 0.46 mm (0.46") (for 1 hour rating) or 0.61 mm (0.024") (for 2 hour rating) thick, fastened to Z-Girts by 19 mm (0.75") long self drilling screws maximum 305 mm (12") on centre. Lap joints of adjacent panels fastened by 19 mm (0.75") long lap screws maximum 405 mm (16") on centre.

Note: For exact application and specification of ULC design No. W605 or W606, contact Mineral wool manufacturer or supplier.