

FIRE RESISTANCE TIME-RATED DESIGNS

UL FIRE RESISTIVE ASSEMBLIES

Fire Ratings specified in this section pertain to UL Classifications which are based on standard test method ANSI/UL263, ASTM E119, UBC 7-1, NFPA 251, CAN/ULC - S101M

FLOOR/CEILING ACOUSTICAL ASSEMBLIES¹

| Type of construction | Maximum time rating (hrs) | UL design number | Concrete thickness (in.) | Panel or tile size (in.) | Panel type ² | Edge detail allowed ³ | Panel or tile thickness (in.) | Minimum fixture area (ft ² /100 ft ²) | Maximum duct area (in ² /100 ft ²) | Grid system |
|---|---------------------------|------------------|--------------------------|---|-------------------------|----------------------------------|-------------------------------|--|---|------------------------|
| Concrete on metal lath or corrugated steel deck, steel joists | 2 | G208 | 2-1/2 | 24 x 24 24 x 36 24 x 48 24 x 60 20 x 60 | Wet-Felted/G2 | T, R, G | 5/8 3/4 | 25 | 576 | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 2 | G218 | 2-1/2 | 24 x 24 24 x 36 24 x 48 | Wet-Felted/G2 | T, R, G | 5/8 3/4 | 25 | 576 | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 2 | G248 | 2-1/2 | 24 x 24 24 x 36 24 x 48 | Wet-Felted/G2 | T, R, G | 5/8 3/4 | — | — | 15/16" FireSecure Stab |
| Concrete on metal lath or corrugated steel deck, steel joists | 2 | G255 | 2-1/2 | 24 x 48 20 x 60 | Wet-Felted/G2 | T, R, G | 5/8 3/4 | 24 | 576 | 15/16" FireSecure Stab |
| Wood deck | 1 | L201 | — | 24 x 24 24 x 36 24 x 48 | Wet-Felted/G2 | T, R | 5/8 3/4 | 8 | 25 | 15/16" FireSecure Stab |

ROOF/CEILING ACOUSTICAL ASSEMBLIES¹

| Type of construction | Maximum time rating (hrs) | UL design number | Concrete thickness (in.) | Panel or tile size (in.) | Panel type ² | Edge detail allowed ³ | Panel or tile thickness (in.) | Minimum fixture area (ft ² /100 ft ²) | Maximum duct area (in ² /100 ft ²) | Grid system |
|--|---------------------------|------------------|--------------------------|--|-------------------------|----------------------------------|-------------------------------|--|---|------------------------|
| BUR, modified or single-ply over steel deck, steel joists | 1 | P204 | — | 24 x 24 24 x 36 24 x 48 | Wet-Felted/G2 | T, R | 5/8 3/4 | 16 | 57 | 15/16" FireSecure Stab |
| BUR, modified, single-ply or metal over steel deck, steel joists | 1.5 | P259 | — | 24 x 24 24 x 36 24 x 48 20 x 60 | Wet-Felted/G2 | T, R | 5/8 3/4 | 24 | 576 | 15/16" FireSecure Stab |
| BUR, modified or single-ply over gypsum concrete, steel joists | 1 | P260 | — | 24 x 48 | Wet-Felted/G2 | T | 5/8 3/4 | 16 | 288 | 15/16" FireSecure Stab |
| BUR, modified or single-ply over cellular, vermiculite or perlite concrete, steel joists | 1 | P261 | — | 24 x 24 24 x 36 24 x 48 20 x 60 | Wet-Felted/G2 | T | 5/8 3/4 | 24 | 113 | 15/16" FireSecure Stab |
| BUR, modified or single-ply over insulating concrete, steel deck, steel joists | 1 | P264 | 2-1/4 | 24 x 48 | Wet-Felted/G2 | T | 5/8 3/4 | 24 | 255 | 15/16" FireSecure Stab |
| BUR, modified, single-ply or metal over mineral fiber or gypsum boards, steel deck, steel joists | 2 | P266 | — | 24 x 48 | Wet-Felted/G2 | T | 5/8 3/4 | 24 | 576 | 15/16" FireSecure Stab |

PANEL AND TILE TYPES:

- Class A, B or C roof coverings may be applied directly to the concrete or wood surface of floor/ceiling designs being used as roof/ceiling designs without a reduction of the fire resistance rating.
- Wet-Felted/G2: Wet-Felted Protectone® - Baroque™, Baroque Customline®, Cashmere®, Directional Fissured™, Fine Fissured, Fine Fissured Customline, School Board®.
- Edge Detail Types: T = Trim (Square) Edge; R = Reveal Edge; G = Reveal Edge, Grooved Face (Customline).

The information contained in this table is intended only to be used as a guide. For detailed time-rated assembly information, refer to the latest Underwriters Laboratories Inc. Fire Resistance Directory (ul.com).



ULC FIRE RESISTIVE ASSEMBLIES

Fire ratings specified in this section pertain to ULC Classifications which are based on standard test method ANSI/UL 263, ASTM E 119, UBC 7-1, NFPA 251, CAN/ULC - S101M

FLOOR/CEILING ACOUSTICAL ASSEMBLIES¹

| Type of construction | Maximum time rating (hrs) | ULC design number | Concrete thickness (mm) | Panel or tile size (mm) | Panel or tile type ² | Edge detail allowed ³ | Panel or tile thickness (mm) | Minimum fixture area (m ² /10 m ²) | Maximum duct area (m ² /10 m ²) | Grid system |
|--------------------------------------|---------------------------|-------------------|-------------------------|---|---------------------------------|----------------------------------|------------------------------|---|--|------------------------|
| Concrete on corrugated steel deck | 2 | D203 | — | 600 x 600 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | 2.5 | 0.035 | 15/16" FireSecure Stab |
| Concrete on corrugated steel deck | 2 | D205 | — | 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | 2.5 | — | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 2 | G208 | — | 600 x 600 600 x 1200 600 x 1500 500 x 1500 | Wet-Feltd/G2 | T | 16 | 2.5 | 0.4 | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 2 | G218 | — | 600 x 600 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | 2.5 | 0.4 | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 2 | I210 | — | 600 x 600 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | — | — | 15/16" FireSecure Stab |
| Concrete on metal lath, steel joists | 1 | I211 | — | 600 x 600 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | 0.8 | 0.017 | 15/16" FireSecure Stab |
| Wood deck | 1 | L201 | — | 600 x 600 600 x 1200 500 x 1500 | Wet-Feltd/G2 | T | 16 | 0.8 | 0.02 | 15/16" FireSecure Stab |

ROOF/CEILING ACOUSTICAL ASSEMBLIES¹

| Type of construction | Maximum time rating (hrs) | ULC design number | Concrete thickness (mm) | Panel or tile size (mm) | Panel or tile type ² | Edge detail allowed ³ | Panel or tile thickness (mm) | Minimum fixture area (m ² /10 m ²) | Maximum duct area (m ² /10 m ²) | Grid system |
|---|---------------------------|-------------------|-------------------------|-------------------------|---------------------------------|----------------------------------|------------------------------|---|--|------------------------|
| BUR, modified or single-ply over steel deck, steel joists | 1 | R224 | — | 600 x 600 600 x 1200 | Wet-Feltd/G2 | T | 16 | 1.6 | 0.21 | 15/16" FireSecure Stab |

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