

FIRE & SOUND MANUAL

ARCHITECT VERSION

NOTE REGARDING CANADIAN PROJECTS: Canada accepts all UL Fire Designs listed in this manual. For additional information on Canadian Fire Designs, refer to page 12.

DISCLAIMER: For complete assembly information for a specific fire design, click on the UL number or visit Underwriters' Laboratories website. While the assemblies of the sound tests were constructed to best represent the most commonly built version of the UL fire design, some variances in construction may have occurred (i.e. within a particular UL rating there can be the allowances for different joist spacing and joist depths, different thicknesses and types of insulation or even no insulation, different types of channel, etc.). The sound tests are a representation of what can be expected for sound control ratings when building a floor/ceiling assembly with a specific floor joist assembly that relates to a UL fire design using the designated sound control mat. However, due to the many variables beyond our control (for example quality control of drywall installation, type of resilient channel, density and selection of other building materials, flanking paths, etc.), the sound tests in this resource should not be considered a guarantee of performance. For this same reasoning and the fact that the sound tests were run in different buildings, different laboratories, and different environments, this data can be used for comparison and design evaluation but should not be considered a guarantee of performance. All acoustical testing was done by Architectural Testing; Riverbank Testing Laboratories; Intest, Inc.; Intertek Laboratories; Twin City Testing Corporation; D.L. Adams Associates, L.T.D.; Veneklasen Associates; Maxxon R&D Sound Chamber; NGC Testing Services; AV Group or JGL Acoustics. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



PARALLEL CHORD TRUSS

1 HOUR FIRE DESIGNS

| Min. Truss Depth per UL | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|-------------------------|------------|-------------------|--------------|--------------------|-------------------------|-----------------|--------------|-----|-------------|--|
| | | | | | | | STC | IIC | Test Number | |
| 18" | Yes | Yes | 5/8" (16 mm) | 3/4" (19 mm) | None | Ceramic Tile | 58 | | H6130.01 | <i>Minimum of 12" Truss</i> L528 L529 L542 L563 L574 L576 L579 L581 L583 L592 M508 ICC ESR #2540 UL ER #8477-01 |
| | | | | | | LVT | | 41 | H6130.02 | |
| | | | | | | Ceramic Tile | | 35 | H6130.01 | |
| | | | | | | Carpet & Pad | | 71 | I0101.02 | |
| | | | | | Acousti-Mat 1/8 | Sheet Vinyl | | 52 | I0101.09 | |
| | | | | | | LVT | | 50 | I0101.07 | |
| | | | | | | Ceramic Tile | | 52 | I0101.30 | |
| | | | | | | Engineered Wood | | 55 | I0101.10 | |
| | | | | | | Carpet and Pad | | 72 | I0101.11 | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | Sheet Vinyl | | 54 | I0106.20 | |
| | | | | | | LVT | | 53 | I0106.18 | |
| | | | | | | Ceramic Tile | | 55 | I0106.24 | |
| | | | | | | Engineered Wood | | 55 | I0106.21 | |
| | | | | | | Carpet and Pad | | 71 | I0106.22 | |
| | | | | | Acousti-Mat 1/4 Premium | Sheet Vinyl | | 55 | I0101.17 | <i>Minimum of 18" Truss</i> L534 L546 L558 L562 L574 L585 M503 |
| | | | | | | LVT | | 54 | I0101.15 | |
| | | | | | | Ceramic Tile | | 55 | I0101.21 | |
| | | | | | | Engineered Wood | | 55 | I0101.18 | |
| | | | | | | Carpet and Pad | | 76 | I0101.19 | |
| | | | | | Acousti-Mat 3/8 | Sheet Vinyl | | 56 | I0106.28 | |
| | | | | | | LVT | | 55 | I0106.26 | |
| | | | | | | Ceramic Tile | | 57 | I0106.32 | |
| | | | | | | Engineered Wood | | 56 | I0107.05 | |
| | | | | | | Carpet and Pad | | 75 | I0106.30 | |
| | | | | | Acousti-Mat 3/8 Premium | LVT | | 57 | I0107.27 | |
| | | | | | | Ceramic Tile | | 58 | I0107.32 | |
| | | | | | | Engineered Wood | | 58 | I0107.29 | |
| | | | | | | Carpet and Pad | | 79 | I0107.30 | |
| | | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Sheet Vinyl | | 57 | I0101.25 | |
| | | | | | | LVT | | 56 | I0101.23 | |
| | | | | | | Ceramic Tile | | 59 | I0101.29 | |
| | | | | | | Engineered Wood | | 57 | I0101.26 | |
| | | | | | | Carpet and Pad | | 77 | I0101.27 | |
| | | | | | Acousti-Mat 3/4 Premium | Sheet Vinyl | | 58 | I0107.20 | |
| | | | | | | LVT | | 59 | I0107.19 | |
| | | | | | | Ceramic Tile | | 60 | I0107.24 | |
| | | | | | | Engineered Wood | | 60 | I0107.21 | |
| | | | | | | Carpet and Pad | | 79 | I0107.22 | |

* Contact Maxxon for specific brand, thickness, and installation details.

Other Parallel Chord Truss ULs: For special assemblies and other burn ratings including 2 hr designs, additional Parallel Chord Truss UL Fire Ratings exist. Refer to pages 11 & 12 for a list of these assemblies. The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



I-JOIST

1 HOUR FIRE DESIGNS

| Min. Truss Depth per UL | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|-------------------------|------------|-------------------|-----------------------|--------------------|-------------------------|-----------------|--------------|-----|-------------|--|
| | | | | | | | STC | IIC | Test Number | |
| 9-1/2" | Yes | Yes | 2 Layers 5/8" (16 mm) | 3/4" (19 mm) | None | Bare | | 29 | IN 86-1 | L530 M535 WH J20050694 ICC ESR 1141 ICC ESR 1153 ICC ESR 1305 ICC ESR 1336 ICC ESR 2994 UL ER 8477 |
| | | | | | | Sheet Vinyl | | 40 | IN 86-2 | |
| | | | | | | Carpet and Pad | | 70 | IN 86-6 | |
| | | | | | Acousti-Mat 1/8 | Sheet Vinyl | 57 | 50 | I0108.09 | |
| | | | | | | LVT | | 52 | I0110.18 | |
| | | | | | | Ceramic Tile | | 50 | I0110.24 | |
| | | | | | | Engineered Wood | | 51 | I0108.10 | |
| | | | | | | Carpet and Pad | | 77 | I0110.22 | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | Sheet Vinyl | | 52 | I0109.20 | |
| | | | | | | LVT | | 54 | I0109.18 | |
| | | | | | | Ceramic Tile | | 54 | I0109.24 | |
| | | | | | | Engineered Wood | | 54 | I0109.21 | |
| | | | | | | Carpet and Pad | | 81 | I0109.22 | |
| | | | | | Acousti-Mat 1/4 Premium | Sheet Vinyl | | 55 | I0108.33 | |
| | | | | | | LVT | | 55 | I0108.32 | |
| | | | | | | Ceramic Tile | | 57 | I0108.37 | |
| | | | | | | Engineered Wood | | 56 | I0108.34 | |
| | | | | | | Carpet and Pad | | 83 | I0108.35 | |
| | | | | | Acousti-Mat 3/8 | Sheet Vinyl | | 56 | I0110.12 | |
| | | | | | | LVT | | 55 | I0110.10 | |
| | | | | | | Ceramic Tile | | 59 | I0110.16 | |
| | | | | | | Engineered Wood | | 58 | I0110.13 | |
| | | | | | | Carpet and Pad | | 77 | I0110.14 | |
| | | | | | Acousti-Mat 3/8 Premium | Sheet Vinyl | | 59 | I0110.28 | |
| | | | | | | LVT | | 57 | I0110.26 | |
| | | | | | | Ceramic Tile | | 60 | I0110.32 | |
| | | | | | | Engineered Wood | | 59 | I0110.29 | |
| | | | | | | Carpet and Pad | | 84 | I0110.30 | |
| | | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Sheet Vinyl | | 58 | I0108.25 | |
| | | | | | | LVT | | 57 | I0108.24 | |
| | | | | | | Ceramic Tile | | 59 | I0108.29 | |
| | | | | | | Engineered Wood | | 59 | I0108.26 | |
| | | | | | | Carpet and Pad | | 79 | I0108.27 | |

* Contact Maxxon for specific brand, thickness, and installation details.

Other I-Joist ULs: For special assemblies and other burn ratings, additional I-Joist UL Fire Ratings exist. Refer to page 12 for a list of these assemblies. The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



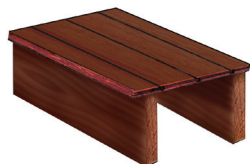
2X10 WOOD JOIST

1 HOUR FIRE DESIGNS

| Min. Truss Depth per UL | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|-------------------------|------------|-------------------|--------------|--------------------|-----------------|-----------------|--------------|-----|-------------|--|
| | | | | | | | STC | IIC | Test Number | |
| 10" | Yes | Yes | 5/8" (16 mm) | 3/4" (19 mm) | None | None | 56 | | I0110.01 | L006 L525 L201 L526 L202 L533 L206 L535 L209 L537 L210 L539 L212 L540 L501 L545 L502 L557 L503 L569 L504 L581 L507 L583 L512 L590 L513 L593 L514 M514 L515 M517 L516 M518 L517 M519 L519 M530 L522 M531 L523 |
| | | | | | | Sheet Vinyl | | 44 | D8457.19 | |
| | | | | | | LVT | | 35 | D8457.06 | |
| | | | | | | Ceramic Tile | | 29 | D8457.01 | |
| | | | | | | Carpet and Pad | 60 | | TL81-16 | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | Sheet Vinyl | | 51 | I0112.20 | |
| | | | | | | LVT | | 51 | I0112.19 | |
| | | | | | | Ceramic Tile | | 52 | I0112.24 | |
| | | | | | | Engineered Wood | | 51 | I0112.21 | |
| | | | | | | Carpet and Pad | | 73 | I0112.22 | |

* Contact Maxxon for specific brand, thickness, and installation details. ** Depending on UL Fire Design, sound tests were on 3/4", so ratings can apply to both depths.

Other 2x10 ULs: For special assemblies and other burn ratings including 2 hr designs, additional 2x10 Wood Joist UL Fire Ratings exist. Refer to pages 11 & 12 for a list of these assemblies. The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

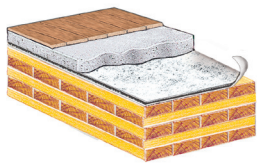


OLD TIMBER

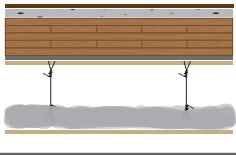
| Truss/Joists | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | |
|--------------------|------------|-------------------|---------|---------------------|-----------------------------------|--------------------------|--------------|----------|-----------------|
| | | | | | | | STC | IIC | Test Number |
| Dimensional Lumber | No | No | N/A | N/A | None | None | 30 F-STC | | 3018 02 31573.7 |
| | | | | | | | | 33 F-IIC | 3018 02 31573.5 |
| | | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Tile | 47 F-STC | | 3018 02 31573.6 |
| | | | | | | Engineered Wood on Pad | | 52 F-IIC | 3018 02 31573.4 |
| | | | | | | Vinyl | | 46 F-IIC | 3018 02 31573.3 |
| | | | | | Acousti-Mat 3/4 & Acousti-Mat SBR | Cementitious Overlayment | 52 F-STC | 51 F-IIC | 30160-04-62432 |
| | | | | 2" concrete (51 mm) | Acousti-Mat 3/4 Premium | Exposed Concrete | | 47 F-IIC | D7299-02-201-10 |

* Contact Maxxon for specific brand, thickness, and installation details.

The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system for your project, contact your Maxxon Regional Representative at (800) 356-7887.



CLT (CROSS LAMINATED TIMBER)



| CLT | Insulation | Resilient Channel | Ceiling | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|------------|------------------------|-------------------|-----------------------------------|--------------------|-----------------|-----------------|--------------|----------|-----------------|------------------------|
| | | | | | | | STC | IIC | Test Number | |
| 5-ply (7") | 3-1/2" Batt Insulation | Yes | Suspended Ceiling w/ 5/8" Drywall | 3/4" (19 mm) | Acousti-Mat 1/8 | LVT | 54 F-STC | | F1177.02-201-10 | M533 |
| | | | | | | Carpet and Pad | 54 F-STC | | F1177.02-201-10 | |
| | | | | | | LVT | | 56 F-IIC | F1177.03-201-10 | |
| | | | | | | Carpet and Pad | | 74 F-IIC | F1177.04-201-10 | |



| CLT | Insulation | Resilient Channel | Ceiling | Drywall | Min. Topping Depth | Sound Mat | Topical Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|----------------|------------|-------------------|---------|---------|--------------------|--|-------------|------------------|--------------|----------|--------------------|------------------------|
| | | | | | | | | | STC | IIC | Test Number | |
| 5-ply (6.875") | No | No | No | No | 1-1/2" ** (38 mm) | Acousti-Mat 3/4 | No | None | 47 F-STC | | G9088.06-201-10 | N/A |
| | | | | | | | | None | | 47 F-IIC | G9088.01-201-10 | |
| | | | | | | | | LVT | | 49 F-IIC | G9088.02-201-10 | |
| | | | | | | Acousti-Top | Acousti-Top | LVT on Pad | | 52 F-IIC | G9088.03-201-10 | |
| | | | | | | | | Eng. Wood on Pad | | 51 F-IIC | G9088.04-201-10 | |
| | | | | | | | No | Carpet and Pad | | 75 F-IIC | G9088.05-201-10 | |
| | | | | | 2-1/2" (64 mm) | Acousti-Mat 3/4 Premium | No | None | 49 F-STC | | H6109.19-201-10-R0 | |
| | | | | | | | No | None | | 45 F-IIC | H6109.15-201-10-R0 | |
| | | | | | | | No | LVT | | 47 F-IIC | H6109.16-201-10-R0 | |
| | | | | | | | Acousti-Top | LVT | | 49 F-IIC | H6109.17-201-10-R0 | |
| | | | | | 2-1/2" (64 mm) | Acousti-Mat SBR, Acousti-Mat 3/4 Premium | No | None | 51 F-STC | | H6109.14-201-10-R0 | N/A |
| | | | | | | | No | None | | 48 F-IIC | H6109.13-201-10-R0 | |
| | | | | | | | No | LVT | | 53 F-IIC | H6109.12-201-10-R0 | |
| | | | | | | | Acousti-Top | LVT | | 58 F-IIC | H6109.10-201-10-R0 | |
| | | | | | | | No | Engineered Wood | | 53 F-IIC | H6109.09-201-10-R0 | |
| | | | | | | | Acousti-Top | Engineered Wood | | 56 F-IIC | H6109.07-201-10-R1 | |
| | | | | | | | No | Carpet and Pad | | 82 F-IIC | H6109.06-201-10-R1 | |



| CLT | Insulation | Resilient Channel | Ceiling | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|-----|------------|-------------------|---------|---------|--------------------|-----------|-----------------|--------------|----------|-------------|------------------------|
| | | | | | | | | STC | IIC | Test Number | |
| 7" | No | No | No | No | None | No | None | 39 F-STC | 22 F-IIC | 301006866 | L901 |

* Contact Maxxon for specific brand, thickness, and installation details. ** Field testing with 1 1/2" topping has revealed test numbers ranging from 44–49 F-STC. We recommend using a 2" topping depth if code minimum is required. The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system for your project, contact your Maxxon Regional Representative at (800) 356-7887. Cross laminated timber panel thickness can vary slightly between manufacturers.



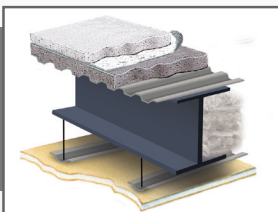
STEEL JOIST/PLYWOOD SUBFLOOR

1 HOUR FIRE DESIGNS

| Subfloor | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|------------------|------------|-------------------|---------------------------|--------------------|-----------------|-----------------|--------------|--------------|----------------|------------------------|
| | | | | | | | STC | IIC | Test Number | |
| 3/4" T&G Plywood | Yes | Yes | 5/8" (16 mm) | 3/4" (19 mm) | None | Carpet & Pad | 51 F-STC | | 4140 94-2168.1 | L564 L565 M513 |
| | | | | | | | | 73 F-IIC | 4140 94-2168.2 | |
| | | | | | | LVT | | 49 F-IIC | 4140 94-2278 | |
| | | | | Acousti-Mat 1/8 | None | 58 F-STC | | CRA+Span | | |
| | | | | | Hardwood | | 54 F-IIC | CRA+Span | | |
| | | | | | Tile | | 49 F-IIC | CRA+Span | | |
| | | | | | Vinyl | | 53 F-IIC | CRA+Span | | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | None | 59 F-STC | | CRA+Span | |
| | | | | | | Hardwood | | 53 F-IIC | CRA+Span | |
| | | | | | | Tile | | 49 F-IIC | CRA+Span | |
| | | | | | | Vinyl | | 52 F-IIC | CRA+Span | |
| | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Tile | | 57 F-IIC | FIIC 04-22-1 | | |
| | | | | | Vinyl | | 57 F-IIC | FIIC 04-22-2 | | |
| | | | | | Hardwood | | 58 F-IIC | FIIC 04-22-3 | | |
| | | | 2 layers 5/8" (2 x 16 mm) | 1" (25 mm) | Acousti-Mat 1/4 | Tile | | 56 F-IIC | 06-24-1 | |
| | | | | | | Carpet & Pad | | 71 F-IIC | 06-24-2 | |

* Contact Maxxon for specific brand, thickness, and installation details.

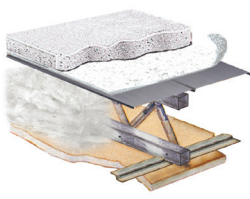
The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



COMPOSITE STEEL/CONCRETE FLOOR CEILING ASSEMBLIES

| Concrete Depth | Insulation | Ceiling | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|--|------------|---|---------------------------|--------------------|-----------------|-----------------|--------------|----------|--------------------|------------------------|
| | | | | | | | STC | IIC | Test Number | |
| 3 1/2" Concrete over Steel Deck | No | Hat Channel Attached to Joist | 5/8" (16 mm) | None | None | None | 57 STC | 28 IIC | TL 01-213, IN 01-8 | G561 |
| 3" Concrete over 9/16" Corrugated Steel Deck | Yes | Wire Hung Grid 17 1/2" Airspace Deck to Ceiling | 5/8" (16 mm) Drywall | None | None | None | 55 STC | 47 IIC | 3193995CRT-001.8 | |
| | | | | None | Acousti-Top | Eng Wood | 55 STC | 64 IIC | 3193995CRT-001.5 | |
| | | | 5/8" (16 mm) Ceiling Tile | None | Acousti-Top | Eng Wood | 54 STC | 62 IIC | 3193995CRT-001.28 | |
| 2 1/2" Lightweight Concrete over Steel Deck | Yes | Wire Hung Grid 34" Airspace Deck to Ceiling | 5/8" (16 mm) | None | Acousti-Top | Tile | | 66 F-IIC | NAC Centerpoint | D502 |
| | | | | 3/8" (10 mm) | Acousti-Top | Eng Wood | | 64 F-IIC | NAC Centerpoint | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | Eng Wood | | 64 F-IIC | NAC Centerpoint | |

* Contact Maxxon for specific brand, thickness, and installation details.



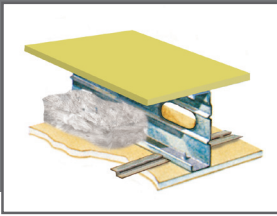
STEEL JOIST/STEEL DECK

1 AND 2 HOUR FIRE DESIGNS

| Subfloor | Insulation | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|------------|------------|-------------------|---------------------------|--------------------|-----------------|-----------------|--------------|-----|-------------|---|
| | | | | | | | STC | IIC | Test Number | |
| Steel Deck | Yes | Yes | 2 layers 5/8" (2 x 16 mm) | 3/4" (19 mm) | None | Ceramic Tile | | 39 | I0115.01 | G551** G553** G560** G563** G566** G574** G587 G592 G597 H502 M511 ICC ESR # 2540** UL E# 8477-01** |
| | | | | | | Carpet and Pad | | 73 | I0115.02 | |
| | | | | | Acousti-Mat 1/8 | Sheet Vinyl | | 51 | I0117.04 | |
| | | | | | | LVT | | 51 | I0117.03 | |
| | | | | | | Engineered Wood | | 52 | I0117.05 | |
| | | | | | | Carpet and Pad | | 73 | I0117.06 | |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | Sheet Vinyl | 55 | 53 | I0114.04 | |
| | | | | | | LVT | | 52 | I0114.02 | |
| | | | | | | Ceramic Tile | | 55 | I0114.08 | |
| | | | | | | Engineered Wood | | 54 | I0114.05 | |
| | | | | | | Carpet and Pad | | 82 | I0114.06 | |
| | | | | | Acousti-Mat 3/8 | Sheet Vinyl | | 53 | I0115.10 | |
| | | | | | | LVT | | 53 | I0115.09 | |
| | | | | | | Ceramic Tile | | 56 | I0115.14 | |
| | | | | | | Engineered Wood | | 55 | I0115.11 | |
| | | | | | | Carpet and Pad | | 80 | I0115.12 | |

* Contact Maxxon for specific brand, thickness, and installation details. ** See UL for specific design detail difference between ratings.

The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



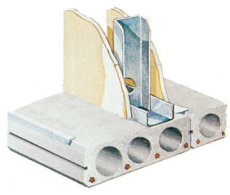
SURE-BOARD/CEMCO SYSTEM

1 HOUR OR 1 ½ HOUR FIRE DESIGNS

| Subfloor | Insulation | Ceiling | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|-----------------|------------|---------|--------------------------|--------------------|-----------------|-----------------|--------------|--------|-------------|------------------------|
| | | | | | | | STC | IIC | Test Number | |
| Sure-bond 200 S | Yes | No | 2 layers of 5/8" (16 mm) | None | None | None | 61 STC | 41 IIC | 16-0201 | H503 |
| | | | | 1" (25 mm) | Acousti-Mat 1/4 | LVT | | 52 IIC | 16-0803 | |
| | | | | | | Hardwood | | 57 IIC | 16-0804 | |
| | | | | | | Vinyl | | 57 IIC | 16-0802 | |
| | | | | | | Hardwood | | 60 IIC | 16-0805 | |

* Contact Maxxon for specific brand, thickness, and installation details.

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PRECAST CONCRETE

1, 2, AND 3 HOUR FIRE DESIGNS

| Concrete Depth | Insulation | Resilient Channel | Suspended Ceiling | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|----------------|------------|-------------------|-------------------|-----------------|--------------------|-----------------|-----------------|--------------|----------|-----------------|---|
| | | | | | | | | STC | IIC | Test Number | |
| 6" | Yes | Yes | Yes | 5/8" (16 mm) | 1" (25 mm) | Acousti-Mat 1/4 | Tile | 59 STC | | TL98-108 | J917** J919** J920** J924** J927** J931** J957** J958** J991** J994** ICC ESR # 2540** UL ER # 8477-01** |
| | | | | | | | | | 57 IIC | IN98-12 | |
| 8" | No | No | No | None | 1/2" (13 mm) | None | None | 58 F-STC | | 5-896 | |
| | | | | | | | Carpet Direct | | 75 F-IIC | 5-896-2 | |
| | | | | | 3/4" (19 mm) | Acousti-Mat 1/8 | Tile | | 54 F-IIC | B2863.04-201-10 | |
| | | | | | | | LVT | | 56 F-IIC | B2863.05-201-10 | |
| | | | | | | | Engineered Wood | | 54 F-IIC | B2863.06-201-10 | |
| | | | | | 1" (25 mm) | Acousti-Mat 1/4 | None | 61 F-STC | | B5011.04-201-10 | |
| | | | | | | | Tile | | 59 F-IIC | B5011.04-201-10 | |
| | | | | | | | LVT | | 57 F-IIC | B5011.04-201-10 | |
| | | | | | | | | | | | |

* Contact Maxxon for specific brand, thickness, and installation details. ** See UL for specific design detail difference between ratings.

The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



CONCRETE

1, 2, AND 3 HOUR FIRE DESIGNS

| Concrete Depth | Insulation | Resilient Channel | Suspended Ceiling | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|----------------|------------|-------------------|-------------------|--------------|-------------------------|-----------------|------------------------|--------------|----------|--------------------|------------------------|
| | | | | | | | | STC | IIC | Test Number | |
| 4" | No | No | No | None | 1" (25 mm) | Acousti-Mat 1/4 | Concrete Micro-Topping | | 50 F-IIC | 30160 03 57761 | J804** J805** |
| | | | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Concrete Micro-Topping | | 59 F-IIC | 30160 03 57761 | |
| 6" | No | No | No | No | N/A | Acousti-Top | LVT | 52 | 52 | H8289.01-303-11-R1 | N/A*** |
| | | | | | | | Tile | | ΔIIC 22 | H8289.01-303-11-R1 | |
| | | | | | | | | | ΔIIC 19 | 7018019 | |
| 8" | No | No | No | None | N/A | None | None | 61 A-STC | | F07-567 | |
| | | | | | | | | 34 F-IIC | | F07-568 | |
| | | | | | 1" (25 mm) | Acousti-Mat 1/4 | LVT | 62 F-STC | | 18 0-0607.2 | |
| | | | | | | | Hardwood | | 64 F-IIC | 18 0-0607.5 | |
| | | | | | | | Tile | | 60 F-IIC | 18 0-0607.7 | |
| | | | | | | | | | 61 F-IIC | 18 0-0607.6 | |
| | | | | | 2-1/2" Concrete (64 mm) | Acousti-Mat 3/4 | None | | 55 F-IIC | 30160 03 56381-4 | |
| | | | | | 1-1/2" (38 mm) | | Tile | | 70 F-IIC | 30160-05-72550-9 | |
| | | | | | 2" Concrete (51 mm) | | None | | 61 F-IIC | 30160 03 56381-5 | |
| | | | Yes | 5/8" (16 mm) | N/A | None | None | 62 A-STC | | 30160-06-77973-1 | |
| | | | | | | | | | 42 F-IIC | 30160-06-77973-1 | |
| | | | | | 1/2" (13 mm) | Acousti-Top | None | | 57 F-IIC | 30160-06-77973-1 | |
| | | | | | | | Hardwood | | 60 F-IIC | 30160-06-77870 | |
| | | | | | | | Tile | | 54 F-IIC | 30160-06-77870 | |
| | | | | | 1" (25 mm) | Acousti-Mat 1/4 | Tile | | 60 F-IIC | 30160-05-67282-2 | |
| | | | | | 1-1/2" (38 mm) | Acousti-Mat 3/4 | Tile | | 74 F-IIC | 30160-05-67282-3 | |

* Contact Maxxon for specific brand, thickness, and installation details. ** See UL for specific design detail difference between ratings.

*** Fire Ratings over 6"+ concrete do not require gypsum concrete. The sound tests above are examples of the many sound tests we have on file. Please refer to the disclaimer on the cover of this guide. For assistance determining the right system and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.

2 HOUR WOOD FRAME FIRE DESIGNS

PARALLEL CHORD TRUSS

| Min Truss Depth per UL | Insulation | Drywall Direct to Joist | Resilient Channel | Drywall | Min. Topping Depth | Sound Mat | Floor Covering* | Sound Rating | | | Maxxon UL Fire Ratings |
|------------------------|------------|-------------------------|-------------------|-------------------------------|--------------------|-----------------|-----------------|--------------|----------|-------------|------------------------|
| | | | | | | | | STC | IIC | Test Number | |
| 12" | Yes | 5/8" (16 mm) | Yes | 2 Layers 5/8" (2x16 mm) | 1-1/2" (38 mm) | Acousti-Mat 3/4 | None | 59 F-STC | | 121114-1STC | L577 |
| | | | | | | Acousti-Mat 3/4 | Tile | | 53 F-IIC | 12214-4 | |
| | | | | | | Acousti-Mat 3/4 | LVT | | 53 F-IIC | 12214-5 | |

MISCELLANEOUS UL FIRE DESIGNS

PARALLEL CHORD TRUSS

| UL # | Unique Assembly Details |
|------|--|
| L529 | Suspended Ceiling |
| L542 | Furring Channels/Drywall Screwed Direct |
| L556 | 2HR/4 Layers of Drywall |
| L577 | 2HR/3 Layers of Drywall |
| L581 | Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board |
| L583 | Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board |
| M500 | 2HR/3+ Layers of Drywall |
| M510 | 2HR/3 Layers of Drywall - 1 Layer Screwed Direct |

2X10

| UL # | Unique Assembly Details |
|------|--|
| M504 | 0.75 HR/Drywall Screwed Direct |
| M514 | Sound Break Gypsum Board from National Gypsum |
| L581 | Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board |
| L583 | Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board |

ULC DESIGN

| # | Hour Rating | Type of Construction |
|------|-------------|--|
| I530 | 1.5, 2 | TotalJoist by iSPAN® |
| L003 | 1 | 2" x 10" Wood Joist |
| L201 | 1 | 2" x 10" Wood Joist |
| L511 | 2 | 2" x 10" Wood Joist |
| L512 | 1 | 2" x 10" Wood Joist (Commercial Construction Only) |
| M500 | 1 | 2" x 10" Wood Joist |
| M501 | 1 | 2" x 10" Wood Joist |
| M503 | 2 | 2" x 10" Wood Joist |
| M514 | 2 | Parallel Chord Truss or Steel Frame |
| M520 | 1 | TotalJoist by iSPAN® |
| M521 | 1 | TotalJoist by iSPAN® |

Canada also accepts all UL Fire Designs listed in this manual. For verification of a UL Fire Design for Canada, refer to the UL Environment document CCOX7.R8477 "Floor- and Roof-topping Mixtures Certified for Canada", which can be obtained by contacting your Maxxon Regional Representative or at www.ul.com.

I-JOIST

| UL # | Unique Assembly Details |
|------|--|
| L518 | TJI®/Resilient Channel |
| L530 | TJI®/Simpson Strong Clips |
| L538 | 2HR/3 Layers of Drywall |
| L547 | TJI®/Resilient Channel |
| L556 | 2HR/Wilamette I Beam Truss/4 Layers of Drywall |
| L581 | Kinetics ICW Clip, Batt Insulation, 2 Layers 5/8" Gypsum Board |
| L583 | Kinetics Isomax Clip, Batt Insulation, 2 Layers of 5/8" Gypsum Board |

STEEL JOIST

| UL # | Steel Joist Manufacturer |
|------|---|
| G230 | 2HR/Midcon MetalEdge concrete T&G plank |
| G516 | 2HR/Midcon MetalEdge concrete T&G plank |
| G592 | 1, 2HR/Plycem Board |
| H502 | 1, 1½, 2HR/Plycem Board |

For assistance determining the right systems and UL Fire Rating for your project, contact your Maxxon Regional Representative at (800) 356-7887.



Another superior product from:
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