



## MegaSonic 3A & 4A – Series Flush or Embossed Doors

### Features and Benefits

MegaSonic Model 3A & 4A Series Doors offer the following standard unique features to provide long term performance and durability:

1. **Cam-Lift Hinges (Supplied by MegaMet):** These hinges force the Door Bottom Seal to compress against and sit down on top of our saddle type threshold.

2. **Door Bottom:** Features our exclusive integral heavy duty and over sized compressible neoprene seal. This seal is also adjustable, removable and concealed.

- $\frac{3}{4}$ " adjustment allows for most additional flooring material and provides side to side height adjustment.
- If the Door Bottom Seal is damaged in the field it can be easily removed and replaced without having to take the door down.

3. **Door Top:** Features our exclusive factory installed Double Bulb Seals along with the C-fold seal inserted into our kerfed frame stop and the huge adjustable soffit mounted Bulb seal on the frame. This creates an industry best quadruple perimeter sound barrier that eliminates noise flanking through the gap between door and frame.

4. **Door Core:** Features our exclusive sophisticated combination of perforated metal, hat shaped baffles, acoustical insulation and most importantly our recycled acoustical membrane. All this is assembled by hand, in the Heart-of-Dixie, by our esteemed MegaTeam and does the trick of absorbing a wide range of sound frequencies.

4. **Full perimeter 14-gauge channels:** Standard with extra long legs. These are not only welded to the door skins with with a resistance bridge welder, but also Seam welded with a Mig gun to provide structural support and stability the full length of the door edges.

#### Available edge options

- **Seamless Welded Vertical Edges (Standard)** – Edge seam includes 1" long center seam welds every 6" of the full height and then epoxy filled.
- **Continuously Welded Vertical Edges (Optional)** – Edge Seam is continuously Mig welded and finished smooth.

5. **Beveled Lock Edge:** Allows for tighter installation tolerances, operation and eliminates binding.

7. **Factory Applied Rust Inhibiting Primer:** Painted in accordance with ANSI A250.10-1998 (R2004)

### Specification Compliance

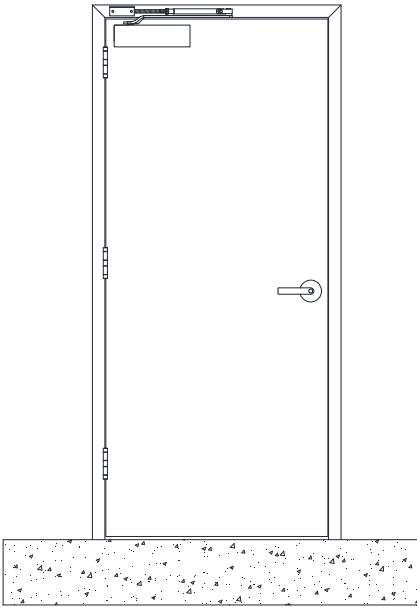
1. Door construction for MegaSonic Model 2A Full Flush Doors meet the requirements of:

- HMMA 865
- ASTM E90
- ASTM E413
- ANSI/SDI A250.10 & A250.11

2. Hardware preparations and reinforcements are in accordance with ANSI A250.6-2003. Locations are in accordance with ANSI/DHI A115 unless otherwise noted.

### Fire Ratings

MegaSafe doors do meet the broadest fire rating requirements. They are listed for installations requiring compliance with both neutral pressure testing (ASTM E152 and UL-10B) and positive pressure standard (UL-10C).



### About the product

MegaSonic Model 3A & 4A, as well as Model 2A, Series Flush Doors are designed to limit the transmission of sound, or objectionable noise, from outside of the room. The two methods of rating are known as Sound Transmission Class (STC) and Sound Transmission Loss (STL).

MegaSonic Model 3A & 4A proprietary assemblies were tested as "operable" units in accordance with ASTM E-90 and achieved a STC-53 & STC-56 (Single Door Opening) rating. This was done using the rating system established in ASTM E-413. An extensive variety of door, frame & gasket combinations were tested in order to maximize choices in performance level. The sealed test was conducted solely to determine the door's performance when not supplied as an assembly.

The MegaSonic Model 3A & 4A Sound Controlled Assembly consist of the door, frame, cam-lift hinges, saddle type threshold & all gasket. Locks, hinges & closer are supplied by the client. Hardware recommendations are contain in SDI-128 and HMMA 865 "Guide Specifications for Sound Control Hollow Metal Doors & Frames".

MegaSonic Model 3A Series Doors are 1-3/4" (45mm) thick.  
MegaSonic Model 4A Series Doors are 2-1/4" (57mm) thick.

High or Semi-gloss paint accentuates the visibility off all welds.

**THE USE OF GLOSSY PAINT IS NOT RECOMMENDED.**

### Installation

1. Installation shall conform to the published MegaMet's installation instructions and installation video posted on our website [www.megametusa.com](http://www.megametusa.com), <http://www.naamm.org/store/product/10/guide-specifications-for-installation-and-storage-of-hollow-metal-doors-and-frames> and, <http://www.naamm.org/store/product/54/painting-hollow-metal-products>

2. Fire Rated Assemblies must be in accordance with NFPA Pamphlet 80. The *Authority Having Jurisdiction* is the final authority on issues related to the installation and use of installed Fire Rated Doors.

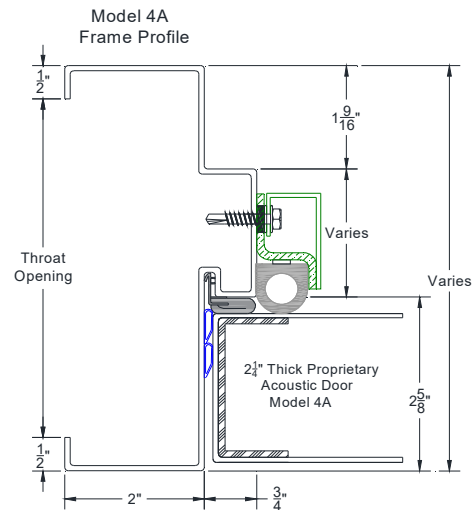
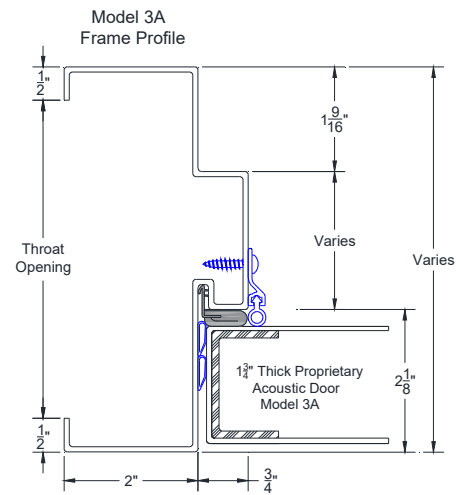
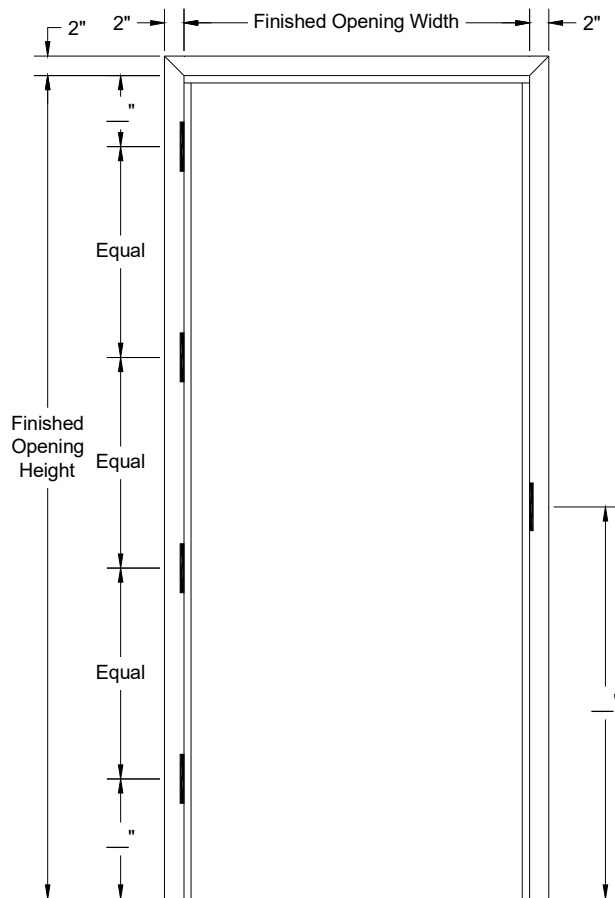
SERIES	MAXIMUM OPENING SIZE		JAMB DEPTH AVAILABILITY (Profile)				STANDARD PROFILE DIMENSIONS (Variations Available)			CORNERS
	Single	Pair	STANDARD		KERF		FACE	STOP	RETURNS	STANDARD
			DOUBLE RABBET	DOUBLE RABBET	DOUBLE RABBET	DOUBLE RABBET				
			Minimum	Maximum	Minimum	Maximum				
3A *14ga.	5'-0" x 11'-10" (1524mm x 3607mm) ***	10'-0" x 11'-10" (3048mm x 3607mm) ***	N/A	N/A	4-1/2" (114mm)	20" (508mm) ***	2" (51mm)	3/4" (16mm)	1/2" (13mm) **	DIE MITERED with concealed tabs interlocking head & jambs
4A *14ga.	5'-0" x 11'-10" (1524mm x 3607mm) ***	10'-0" x 11'-10" (3048mm x 3607mm) ***								

\* 14 gauge is the standard material for all MegaSonic Assemblies. Heavier gauges not available.

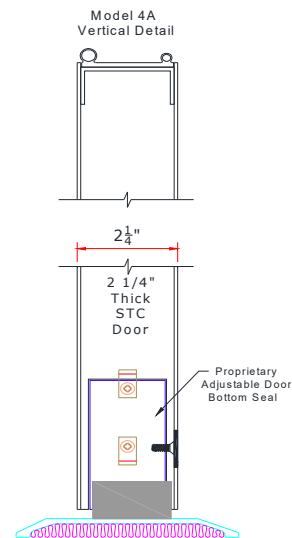
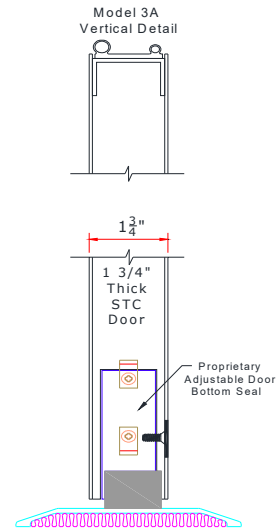
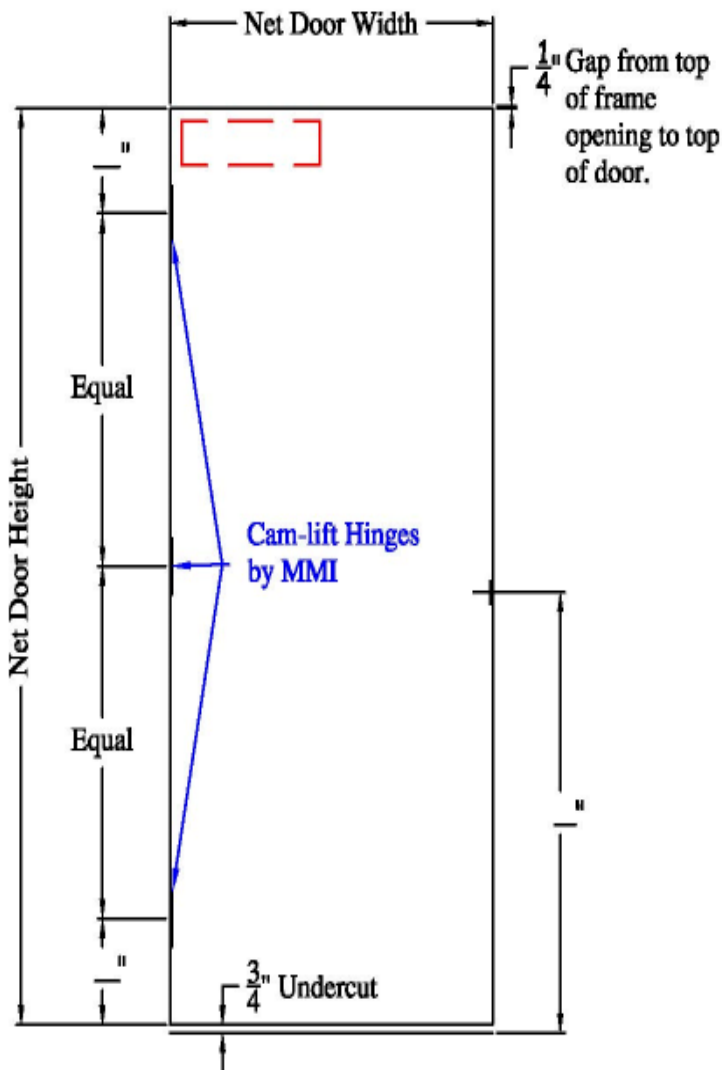
\*\* except at 5 3/4" (146mm) Jamb Depth, which is 7/16" (11mm)

\*\*\* call factory for larger size availability

### Frame Elevation



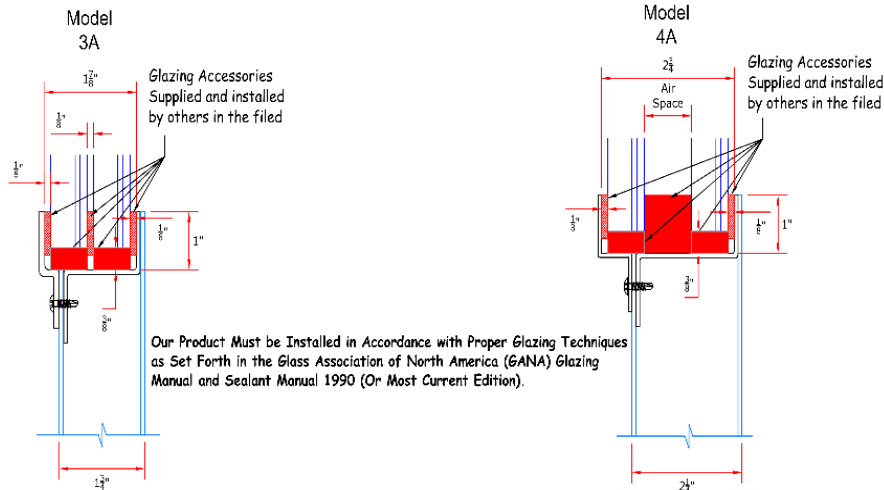
MegaSonic Door Series	STC Rating	Door Thickness	Acoustic Test & Recommendations	Fire Testing & Ratings	Building Design (Fire-Safety-Accessibility)
Model 3A	Up to STC-53	1-3/4"	ASTM E90    ANSI S12.60 ASTM E413    DCID 6/9 (SCIF)	UL-10C    NFPA 252 UL-10B    NFPA 257	NFPA 80 NFPA 101 ANSI A117.1
Model 4A	Up to STC-56	2-1/4"	ASTM E1332    SDI-128 ASTM E1408	UL Subject 63    HMMA 850 ASTM E152	
Model 4A (Custom)	STC-56 through STC-60	2-1/4"			



## Glazing in Doors

Doors prepped for glazing do not react the same as flush doors in acoustic test. The light kit design, attachment, type and combination of glass or glazing, and the glazing putty, tape or channels interrupt the door's acoustic core and therefore the performance. The STC (or STL) of a flush door may be reduced by anywhere from 5 to 15 when glazing is incorporated. As an example, the use of glazing system available from a major manufacturer is rated at STC 44 when tested with non-operable panel tested at STC 55. STC ratings of glazed 1 3/4" doors from other manufacturers are STC rated in the low to mid 40s.

MegaMet lite kits are manufactured with State-of-Art designs that minimize sound transmission, yet still have the "good looks" you would expect from MegaMet! Our 1 3/4" MegaSonic door designs will reduce the inherent negative effect of glazing.



## Project Designs Requiring Wood Veneer and Plastic Laminates

If the design elements of the project require wood veneer, MegaMet can readily provide it for you. Exotic species from anegre to zebrawood can be expertly applied. The more common veneers of rotary natural birch and plain sliced red oak are always available for your project needs.

Standard veneer lay-ups:

- Running Match
- Book Matched
- Balanced Matched
- Random Match

Any solid or patterned plastic laminate can be applied at MegaMet's facility on all standard or speciality doors.

