CARACTERÍSTICAS DE PUERTAS DE ACERO

Nuestras puertas metálicas superan las exigencias de los laboratorios de pruebas más prestigiados a nivel mundial, como:

Detrás de cualquiera de nuestras puertas, existe una garantía de seguridad y calidad así como una amplia gama de diseños, tamaños y diferente calibres que van desde 16, 18 y 20 rolado en frío (ASTM A 366) o galvaneal A 60 (ASTM A526).

Nuestra infraestructura nos permite cubrir tecnicamente cualquier necesidad con un portafolio de productos en constante crecimiento. Hoy, podemos ofrecerle puertas con aislante térmico interno de poliestireno estructural de alta densidad (17 Kg/m³), panel de abeja (honeycomb) o lana mineral de acuerdo a las normas UBC-72(97), UL-10B y UL-10C con un espesor estándar de 1 3/4". Entre nuestros modelos, se fabrican puertas **Swingerdoor, Stiffened Doors, EC Doors, Dutch Doors, puertas blindadas nivel 3 y 4, puertas contra huracán, acústicas y puertas corredizas corta fuego.** Esto le permite a los arquitectos y diseñadores el acceso a más opciones, contando siempre con la seguridad, rendimiento y calidad certificadas.

CERTIFICACIÓN

La certificación es por medio de etiquetas emitidas por los diferentes laboratorios de prueba que cuentan con un número de registro para su control. Esta etiqueta va adherida a la puerta, de esta manera el cliente tiene diferentes opciones para determinar la certificación del laboratorio que especifique el proyecto, significando esto una ventaja sensible sobre otras marcas. Adicionalmente nuestras puertas están aprovadas por UL y FM para resistir el fuego por tres horas.

SELLOS TROQUELADOS DE CERTIFICACION.

VENTAJAS

- La excelencia en ingeniería de diseño de MMI ha logrado producir puertas con un diseño económico, práctico y muy resistente.
- Cada puerta cuenta con un refuerzo largo en la bisagra superior y el sistema exclusivo patentado de unión SUPERIOR STRONG TAB.
- Cumple con los niveles 1 y 2 de de criterios de diseño solicitados en especificaciones gubernamentales de los Estados Unidos de Norte América y en SDI 100 del Steel Door Institute.
- Cuentan con preparaciones para diversos herrajes de línea homologados por ANSI norma A 115, estas preparaciones son hechas directamente en planta si así se requiere y pueden ser para barras de pánico, cerraduras, cierra puertas, bisagras, etc.
- Para mayor resistencia a la corrosión, están disponibles en acero galvaneal A60 en calibre 20, 18 y 16.
- Su abatimiento universal permite que la puerta sea instalada en aperturas izquierdas o derechas.

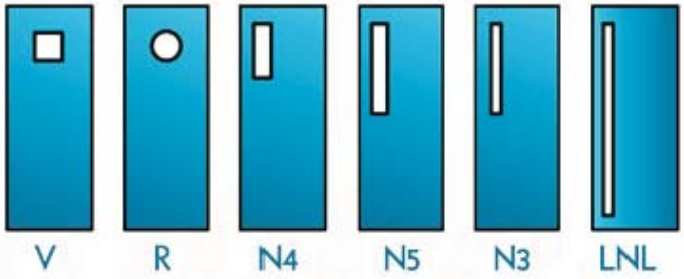
ABATIMIENTO UNIVERSAL.

ESTILOS DE PUERTAS

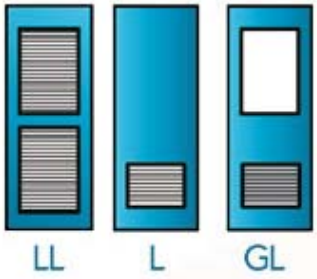
PANEL LISO COMPLETO Y PUERTAS CON VIDRIO.

PUERTA HOLANDESA.

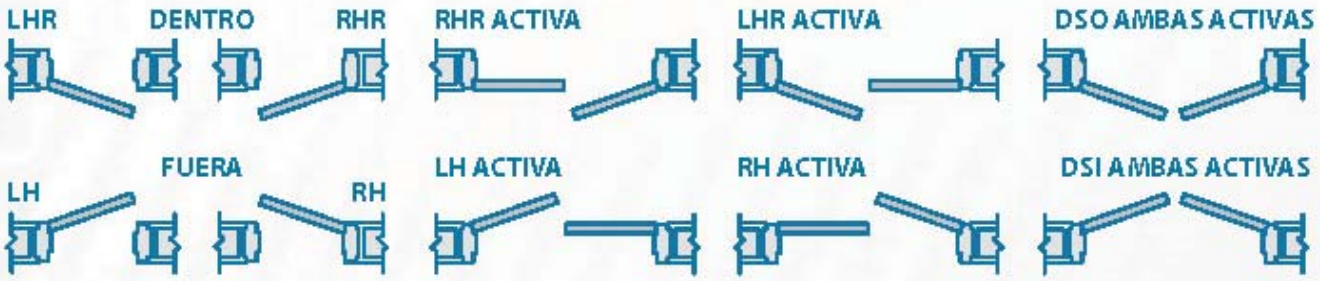
PUERTAS CON MIRILLA DE VIDRIO.



PUERTAS CON REJILLAS (LOUVERS).



ABATIMIENTO DE PUERTAS

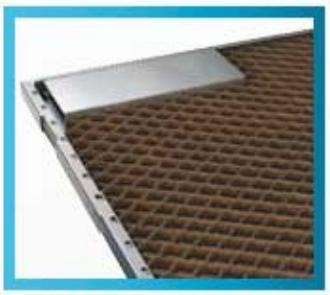


SWINGERDOOR

Es la puerta más utilizada en las construcciones de tipo industrial, comercial y de servicios. Se fabrica con dos hojas de lámina de acero completamente lisas y sin marcas de soldadura, denominadas Pan y Lid.
Su abatimiento universal permite que la puerta sea instalada en aperturas izquierdas o derechas, que significa una solución importante para el desarrollo de obras donde los abatimientos pueden variar por necesidades del edificio. Esta puerta esta certificada por UL, FM y WHI hasta por tres horas contra incendio en un diseño tipo F totalmente cerrado es decir, sin aplicaciones de mirillas o louvers. En caso de requerirlo, las resistencia al fuego puede variar dependiendo del tamaño del elemento insertado a la puerta.

TIPO DE RELLENO

RELLENO DE POLIESTIRENO CON REFUERZO PARA CIERRA PUERTAS Y PERFORACIONES PARA GRAPAS DE SUJECION.



RELLENO TIPO PANAL DE ABEJA (HONEYCOMB) CON REFUERZO PARA CIERRA PUERTAS Y PERFORACIONES PARA GRAPAS DE SUJECION.

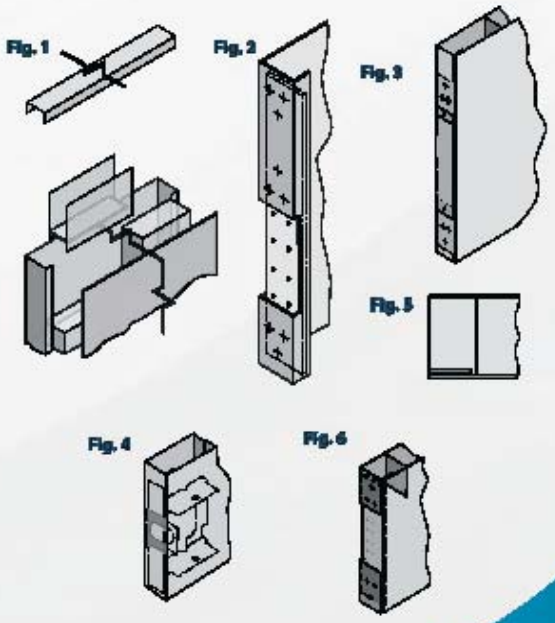
REFUERZOS PARA CIERRA PUERTAS: Cada puerta Swingerdoor tiene incluida una caja de refuerzo para cierra puertas. Fig. 1

REFUERZO PARA BISAGRA: Su diseño permite que la puerta Swingerdoor no se cuelgue ya que tiene un refuerzo para bisagras extra largo 3/16". Fig. 2

REFUERZOS PARA CERRADURAS: Las puertas Swingerdoor vienen preparadas para cerraduras cilíndricas con un backset (medida del centro de la cerradura al canto de la puerta) de 2 3/4" (ANSI A115.2 lock front) o cerraduras mortise con un backset de 2 3/4" (ANSI A115.1 lock front). Fig. 3 y 4

BORDE CON DOBLADILLO: El borde con dobladillo de la puerta Swingerdoor ofrece una transición más uniforme entre ambas caras de la puerta. Fig. 5

ABATIMIENTO UNIVERSAL: Las puertas Swingerdoor tienen la ventaja de que se pueden instalar tanto izquierdas como derechas, debido al dibujo de hoyos doble y el refuerzo para bisagra reversible. Fig. 6



NIVELES DE SEGURIDAD DE PUERTAS CONTRA FUEGO

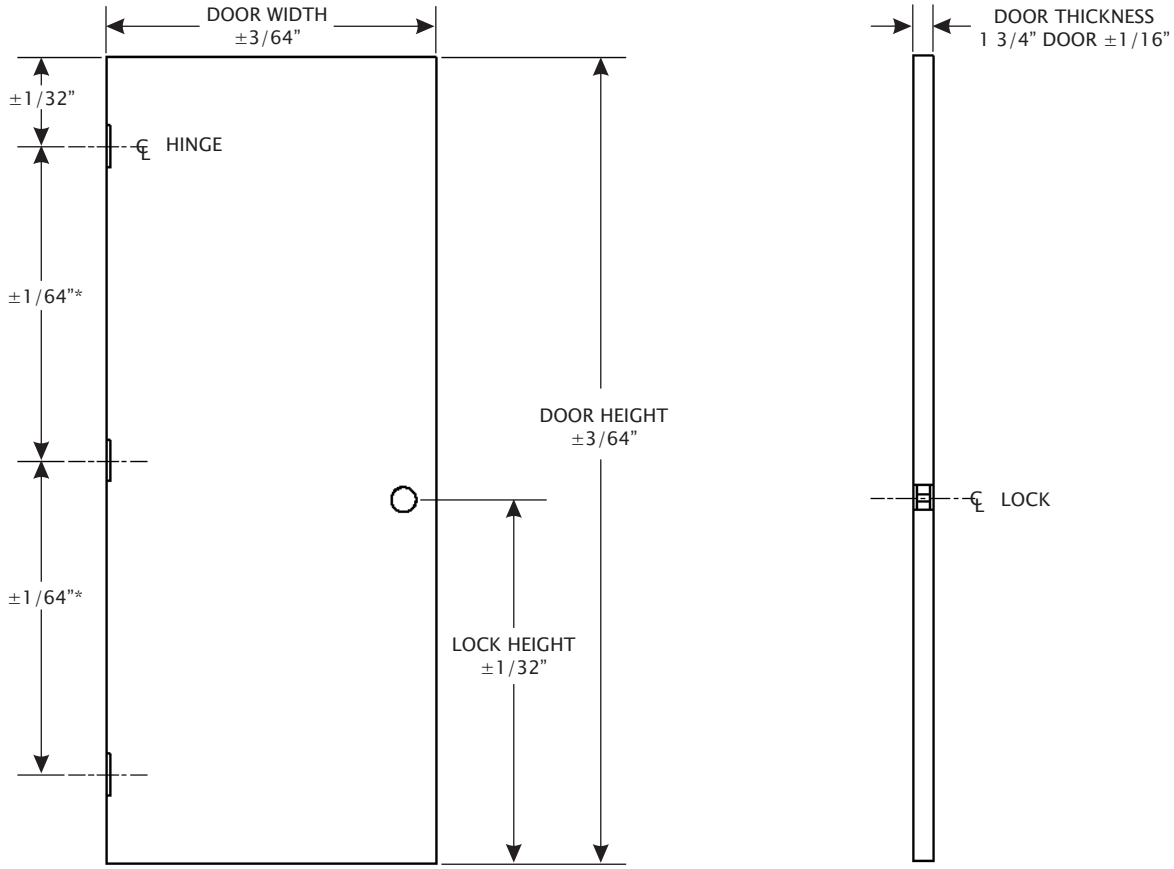
NIVEL	APERTURA	RANGO	CRISTAL	SWINGERDOOR
A	Paredes separando o dividiendo edificios en zonas de alto riesgo de fuego.	3 hrs. (180 min.)	Manufactura especial	
B	Espacios con comunicación vertical, cubos de escalera y ejes de elevadoras.	1-1/2 hrs. (90 min.)	100 pulgadas cuadradas por cada hoja de puerta.	
C	Corredores y divisiones de cuartos	3/4 hrs. (45 min.)	1296 pulgadas cuadradas con dimensiones no mayores a 54" mínimo 6".	
D	Muros exteriores sujetos a fuego severo desde afuera.	1-1/2 hrs. (90 min.)	Ninguna	
E	Muros exteriores sujetos a fuego ligero o moderado desde afuera.	3/4 hrs. (45 min.)	1296 pulgadas cuadradas.	
F	Aperturas entre espacios habitables y corredores donde el humo puede ser peligroso.	1/3 hrs. (20 min.)	1296 pulgadas cuadradas.	

TECHNICAL DATA SHEET DS-100

DOOR TOLERANCES

It is the intention of this publication to furnish users and prospective users of standard steel doors and frames with practical information regarding manufacturing tolerances.

The information contained herein pertains to doors and frames manufactured in accordance with "Recommended Specifications – Standard Steel Doors and Frames" SDI-100, published by the Steel Door Institute.



FLATNESS

Measuring at points between the face of the door and a straight-edge laid from corner to corner the surface cannot vary more than ±3/32". (Both diagonals to be checked on both faces.)

SQUARENESS

Measuring diagonally from corner to corner across the face of a door, the two dimensions shall not vary more than ±1/16".

* TOLERANCES BETWEEN HINGE CENTERLINES ARE NON-ACCUMULATIVE.

Issue Date: November 2002

MESKER

TECHNICAL DATA SHEET DS-101-1

SWINGERDOR
1 3/4”

1. Doors shall be manufactured by Mesker Door Incorporated and designated as SwingerDor 1 ¾”.

N( ) 420-20 gauge 1 ¾ SwingerDor
N( ) 418-18 gauge 1 ¾ SwingerDor
N( ) 416-16 gauge 1 ¾ SwingerDor

( ) = Core designation: “P”- Polystyrene, “H” - Honeycomb, “F” - Fiberboard, or “U” - Urethane.

2. Core material shall be Polystyrene, Honeycomb, Fiberboard or Urethane as called for on plans.

3. Doors shall be full flush constructed of two face sheets of 16, 18 or 20 gauge cold rolled steel, stretcher-levelled quality of flatness or A60 galvannealed steel.

4. Doors shall have neat hemmed vertical edge seams mechanically interlocked for maximum structural integrity. Seamless doors available when required by filling edge or seam. (Designated by an “S” in the above nomenclature.)

5. Doors shall have 7 gauge steel hinge reinforcements with 3 projection welds above and 3 below each hinge mortise. The top hinge reinforcement shall extend to the top of the door and have 3 additional projection welds on the extended leg.

6. Doors shall have a box type closer reinforcement factory installed to reinforce both sides of doors.

7. Doors shall have 16 gauge top and bottom channels welded to door skins on 2” centers.

8. Doors shall be mortised and adequately reinforcd for all hardware. Mortised hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others.

9. Doors shall be bonderized and phosphatized inside and out and receive an exterior factory coat of prime paint.

LABEL SWINGERDORS 1 3/4” - 16, 18 OR 20 GAUGE.
SWINGERDORS ARE AVAILABLE WITH UL, WHI AND FACTORY MUTUAL LABELS AS SHOWN BELOW:

CORE MATERIAL	POLYSTYRENE	HONEYCOMB	URETHANE	FIBERBOARD
GAUGE	16, 18 & 20 GAUGE	16, 18 & 20 GAUGE	16 & 18 GAUGE	16 & 18 GAUGE
LABEL	A, B & C	A, B, C, D & E	NOT RATED	A, B, C, D & E
HEAT RISE RATING	NONE	NONE	N/A	250° PYRODOR
MAXIMUM SIZES AVAILABLE	SINGLE: 4080 PAIR: 8080	SINGLE: 4080 PAIR: 8080	N/A	SINGLE: 4072 PAIR: 8072

NOTE: 20 gauge not available in doors larger than 3’6” width and 7’2” length.

TECHNICAL DATA SHEET DS-101-2

GENERAL INFORMATION

1. Rating "A" label – 3 hour, "B" label – 1 ½ hour, "C" label – ¾ hour, "D" label – 1 ½ hour and "E" label – ¾ hour.

2. Glass permitted. "B" label – 100 square inches per leaf maximum. Dimensions may not exceed 12" in width or 33" in length. "C" label – 1296 square inches per light, neither dimension may exceed 54". "E" label – 1296 square inches per light, neither dimension may exceed 54". (No glass is permitted in "A" and "D" label doors except 100 square inches in "A" label doors with special glass and glazing.)

3. Temperature rise doors: 250° temperature rise rating not applicable on "C" and "E" label doors due to large glass areas.

4. Fire exit device labels must be attached to door when used with labeled and listed fire exit hardware.

5. All doors listed in pairs can be used with single point lock and automatic flush bolts or vertical rod and mortise panic devices with flush bolts on inactive.

ENGINEERING DATA – CORE MATERIALS

CORE MATERIALS	POLYSTYRENE	HONEYCOMB	URETHANE	FIBERBOARD
PHYSICAL PROPERTIES DENSITY	1.4 PCF	1.2 PCF	2.05 PCF	17.0 PCF
COMP. STRENGTH	23 PSI	30 PSI	27 PSI	100 PSI
COEF. OF EXP./°F	<1 1/2%/VOL.	N/A	N/A	2% WGT.
SOUND TRANSMISSION (STC) 20 GA. FACE SHEETS	25	30	N/A	29
18 GA. FACE SHEETS	27	31	29	32
THERMAL PROPERTIES "R" FACTOR	5	2	13	4
"U" FACTOR	.20	.41	.075	.28
FIRE HAZARD CLASS. FUEL CONTRIBUTED	0	N/A	N/A	30
SMOKE DEVELOPED	50–85	N/A	N/A	0
SERVICE TEMPERATURE RANGE	–65° – 190°F	–65° – 200°F	–65° – 200°F	–50° – 250°F

STANDARD HARDWARE PREPARATIONS

Lock Preparation – Government 161 cylindrical lock (2 3/4 backset) reinforced as in detail G1, DS–113. Government 86 mortise lock (2 3/4 backset) reinforced as in detail G2, DS–113.

Hinge Preparations – 4 1/2" x 4 1/2" standard weight template hinges, 1 1/2" pair on 6'8", 7'0" and 7'2" doors, 2 pair on 7'10" and 8'0" doors.

Surface Mounted Hardware – Doors are factory reinforced for surface mounted hardware when specified. Mounting holes are drilled and tapped in field by others.

Universal Handing – Swingerdors will fit both right and left hand openings due to the double hole pattern and reversible hinge filler.

Pairs of Doors – Pairs of doors may be supplied with astragals when specified. See DS–157 for details.

Packaging – Each door is packed in individual corrugated cardboard cartons clearly identified as to its contents.

TECHNICAL DATA SHEET DS-104-1

BULLET RESISTANT DOORS
1 3/4”

1. Doors shall be manufactured by Mesker Door Incorporated and designated as Bullet Resistant Level III.

BR( ) 414 – 14 GAUGE 1 ¾” BULLET RESISTANT

( )=Core designation – “P” – Polystyrene

2. Core material shall be Polystyrene as called for on Plans.

3. Doors shall be seamless constructed of two face sheets and 1 inner sheet of 14 gauge cold rolled steel, stretcher-levelled quality of flatness.

4. Doors shall have a box type closer reinforcement factory installed to reinforce both sides of doors.

5. Doors shall have 16 gauge top and bottom channels welded to door skins on 4” centers.

6. Doors shall be mortised and adequately reinforced for all hardware. Mortised hardware reinforcements shall be drilled and tapped at the factory. Surface applied hardware shall be field drilled by others.

7. This door must be purchased with bullet resistant frame.

8. Doors shall be bonderized and phosphatized inside and out and receive a factory coat of prime paint.

TECHNICAL DATA SHEET DS-104-2

BULLET RESISTANT DOOR – 14 GAUGE
ENGINEERING DATA – CORE MATERIALS

CORE MATERIALS	POLYSTYRENE	HONEYCOMB
PHYSICAL PROPERTIES DENSITY	1.4 PCF	1.2 PCF
COMP. STRENGTH	23 PSI	30 PSI
COEF. OF EXP./°F	<1 1/2%/VOL.	N/A
SOUND TRANSMISSION (STC) 20 GA. FACE SHEETS	25	30
18 GA. FACE SHEETS	27	31
THERMAL PROPERTIES "R" FACTOR	.22	1.0
"U" FACTOR	.20	.41
FIRE HAZARD CLASS. FUEL CONTRIBUTED	0	N/A
SMOKE DEVELOPED	50–85	N/A
SERVICE TEMPERATURE RANGE	-65° – 165°F	-65° – 200°F

STANDARD HARDWARE PREPARATIONS

Lock Preparation – Government 161 cylindrical lock (2 3/4 backset) reinforced as in detail G1, DS–113. Government 86 mortise lock (2 3/4 backset) reinforced as in detail G2, DS–113.

Hinge Preparations – 4 1/2" x 4 1/2" standard weight template hinges, 1 1/2" pair on 6'8", 7'0" and 7'2" doors, 2 pair on 7'10" and 8'0" doors.

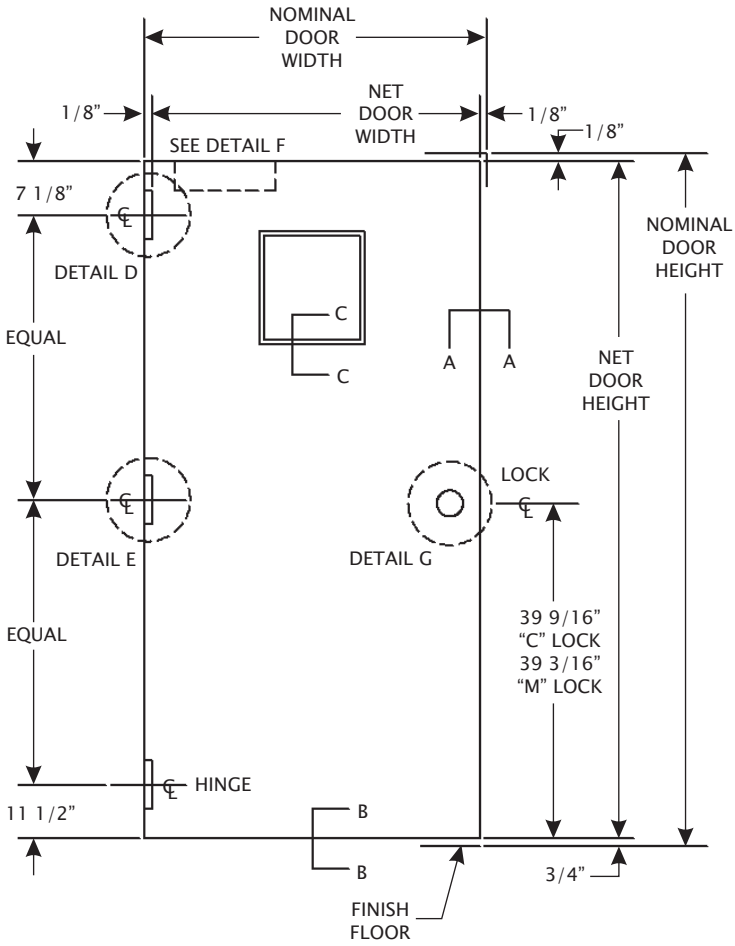
Surface Mounted Hardware – Doors are factory reinforced for surface mounted hardware when specified. Mounting holes are drilled and tapped in field by others.

Universal Handing – Bullet Doors will fit both right and left hand openings due to the double hole pattern and reversible hinge filler plate.

Pairs of Doors – Pairs of doors may be supplied with astragals when specified. See DS–157 for details.

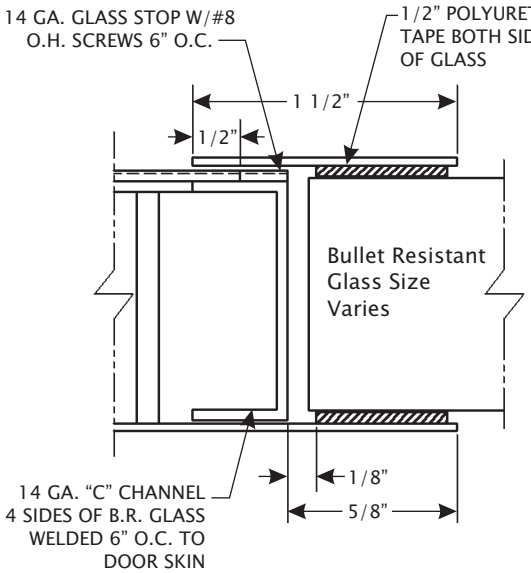
Packaging – Each door is packed in individual corrugated cardboard cartons clearly identified as to its contents.

TECHNICAL DATA SHEET DS-104-3

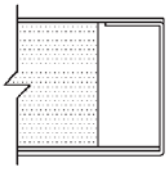


STANDARD DOOR WIDTHS	
NOMINAL DOOR WIDTHS	NET DOOR WIDTHS
2'-0"	23 3/4"
2'-4"	27 3/4"
2'-6"	29 3/4"
2'-8"	31 3/4"
3'-0"	35 3/4"
3'-4"	39 3/4"
3'-6"	41 3/4"
3'-8"	43 3/4"
3'-10"	45 3/4"
4'-0"	47 3/4"

STANDARD DOOR HEIGHTS	
NOMINAL DOOR HEIGHTS	NET DOOR HEIGHTS
6-8"	79 1/8"
7'-0"	83 1/8"
7'-2"	85 1/8"
7'-10"	93 1/8"
8'-0"	95 1/8"

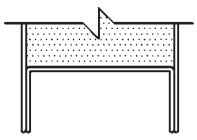


SECTION C-C



THE WRAP AROUND FACE SHEETS ARE BACKED BY A HEAVY CONTINUOUS CHANNEL ON THE VERTICAL EDGES. THE SEAMLESS EDGES ARE WELDED AND FILLED.

SECTION A-A



16 GAUGE TOP AND BOTTOM CHANNEL

SECTION B-B

BULLET RESISTANT

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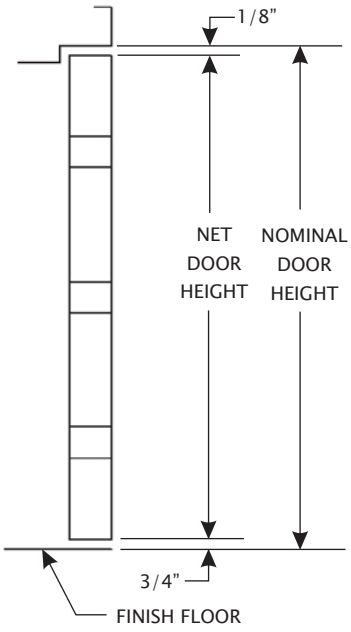
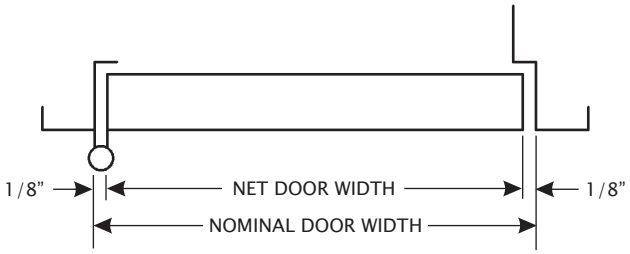
MESKER

TECHNICAL DATA SHEET DS-107

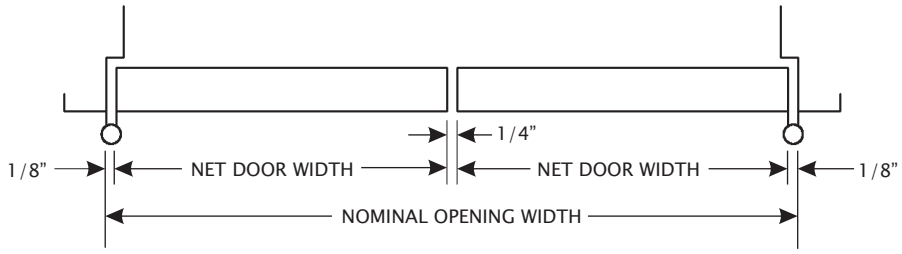
STANDARD CLEARANCES SINGLE AND DOUBLE SWING DOORS



VERTICAL SECTION



HORIZONTAL SECTION
SINGLE SWING DOORS



HORIZONTAL SECTION
PAIR DOORS

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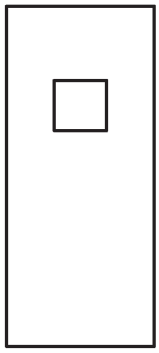
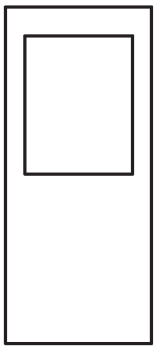
MESKER

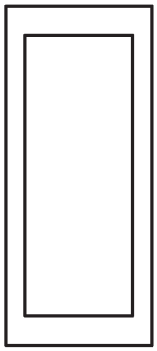
TECHNICAL DATA SHEET DS-158-3



V



G



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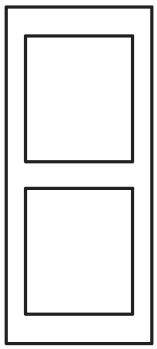
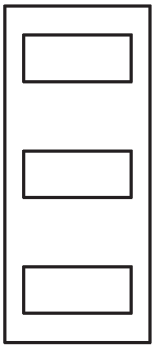
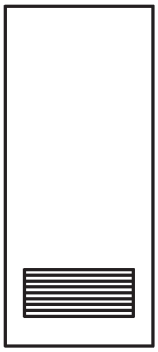


G2



G3



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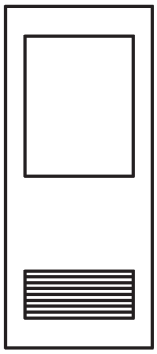

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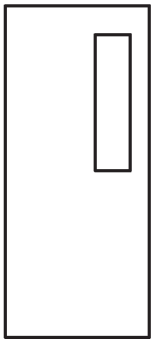
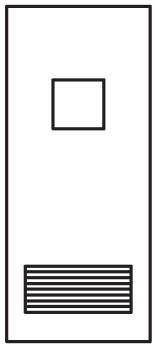


NARROW LITE
SPECIFY SIZE



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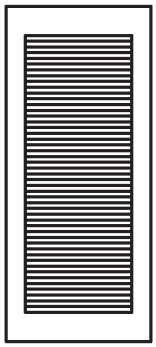

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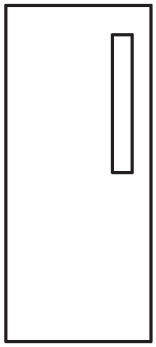

3x33

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