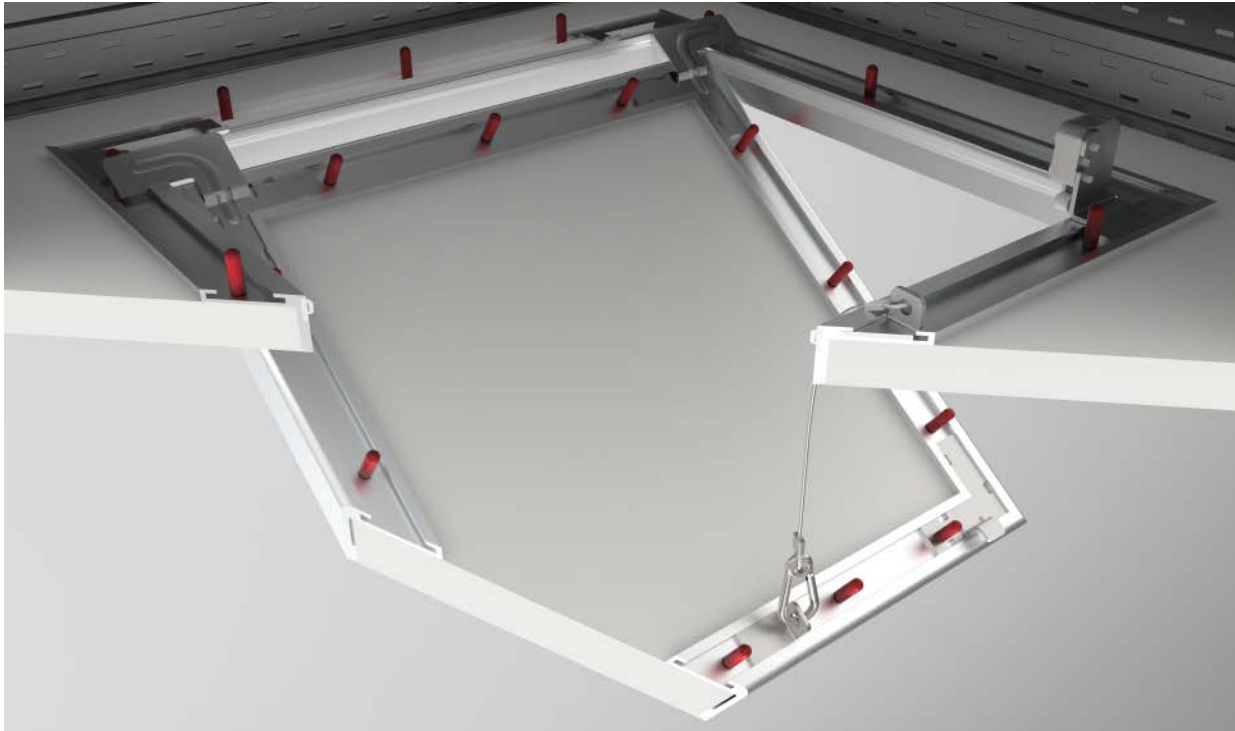


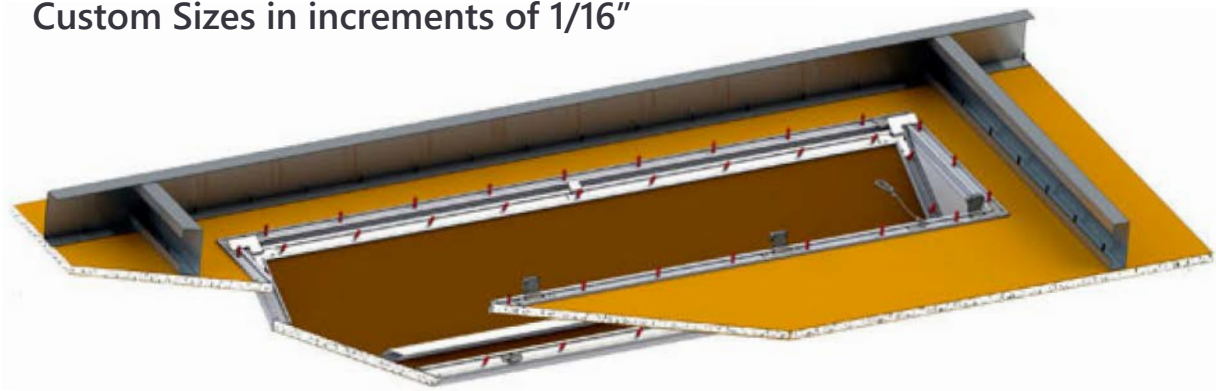
# BAUCO® plus II

Virtually invisible access panels

Standard sizes from 6" x 6" to 24" x 36"



Custom Sizes in increments of 1/16"



Minimum dimension of length or width is 6". Door sizes can be in increments of 1/16". Larger access panels may need to be manufactured as multi-leaf doors.

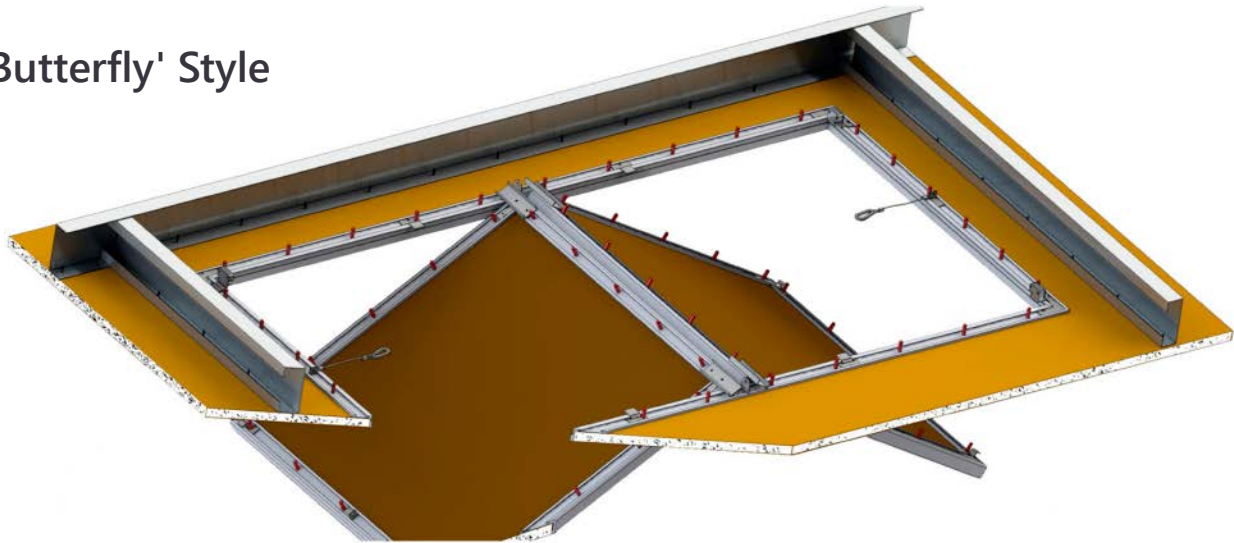
# BAUCO® plus II

Virtually Invisible Access Panels

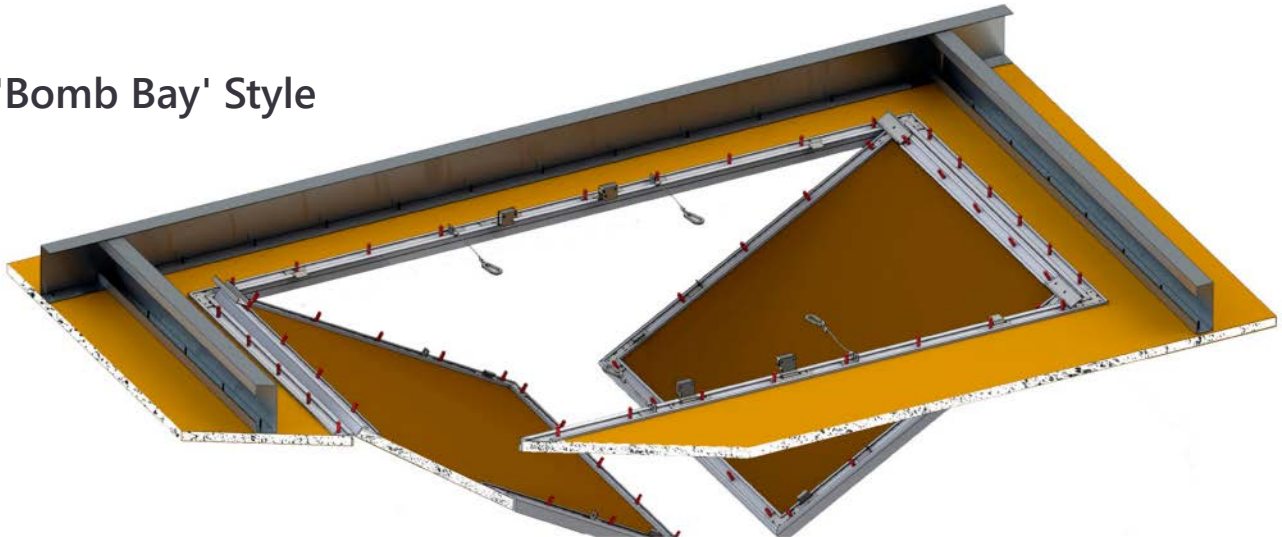
MULTI-LEAF CUSTOM DOORS



'Butterfly' Style



'Bomb Bay' Style



**BAUCO® plus II** panels can be manufactured as multi-leaf doors in Butterfly and Bomb Bay styles. There are no cross bars at the center on either design, just a continuous clear opening.

Note: Clear opening, no cross bar. Size restrictions apply to Bomb Bay style.

# BAUCO® plus II

## DESCRIPTION

The **BAUCO® plus II** is a gypsum wallboard access panel with concealed hardware that blends seamlessly into your wall or ceiling. Once installed and finished to match the surrounding area, a clean 1/16" reveal is all that remains visible. All elegant and functional surface treatments can be applied to the **BAUCO® plus II**. A continuous perimeter gasket in the frame guarantees acoustical integrity of the solid **GWB**. The **BAUCO® plus II** is available in a wide range of custom sizes.

## FOR USE IN

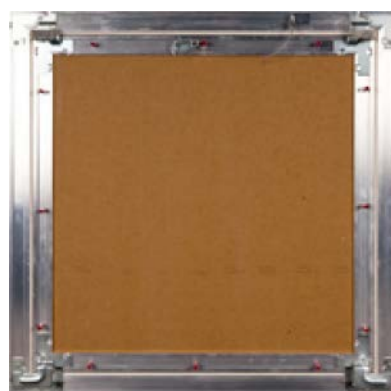
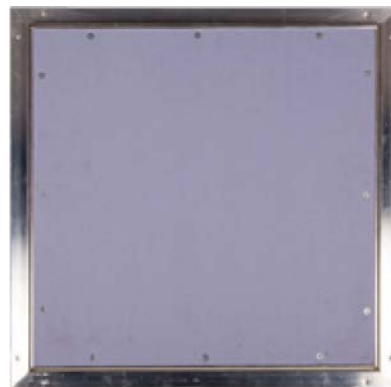
- All assemblies clad in gypsum wallboard, 1/2" or 5/8"
- Wall or ceiling installation
- New construction or repairs
- Rough openings in **GWB** independent of joists/studs
- This product is not fire rated

## BENEFITS

- Virtually invisible access opening
- 1/16" (2 mm) visible gap
- Clean, continuous surfaces without visible hardware
- Variety of finishing options
- Superior acoustics with gasket and mass of **GWB** in door
- Maximum clearance with removable door leaf
- Custom sizes, custom inlays, and custom hardware

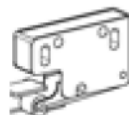
## STANDARD FEATURES

- Concealed mechanical touch latch
- Moisture and mold resistant **GWB** inlay
- Strong concealed aluminum frame and hardware
- Removable door leaf with safety cables
- EPDM rubber perimeter gasket (air and smoke tight)
- **Custom Sizes Available**
- **Inlay & Hardware Options**



## LATCH OPTIONS

Touch Latch



Keyed Lock



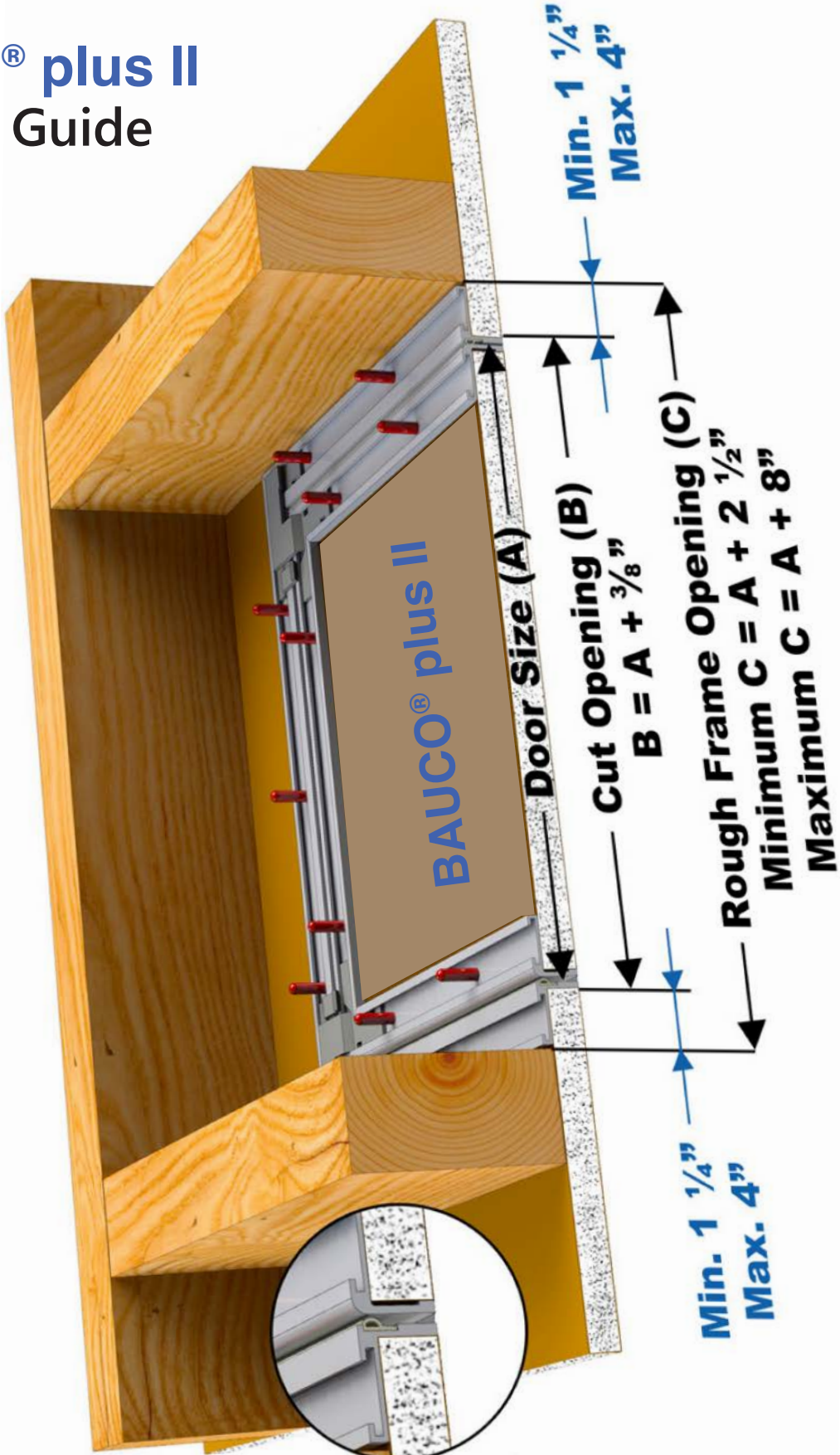
CAM Latch



TORX Latch



# BAUCO® plus II Framing Guide

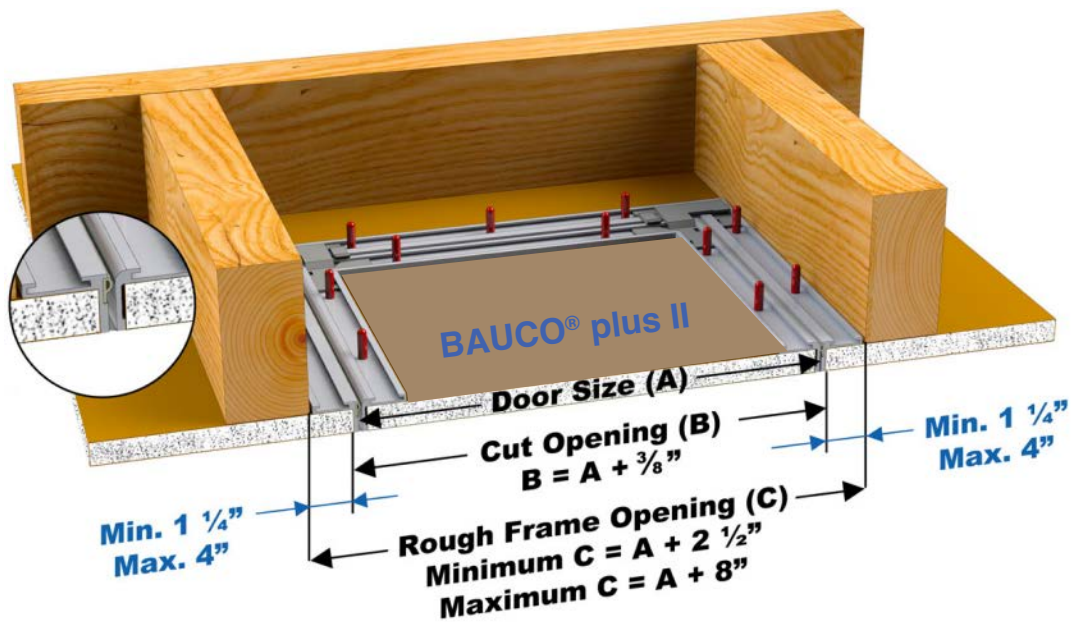




# BAUCO® plus II

## IMPERIAL SIZE CHART FOR STANDARD SIZES

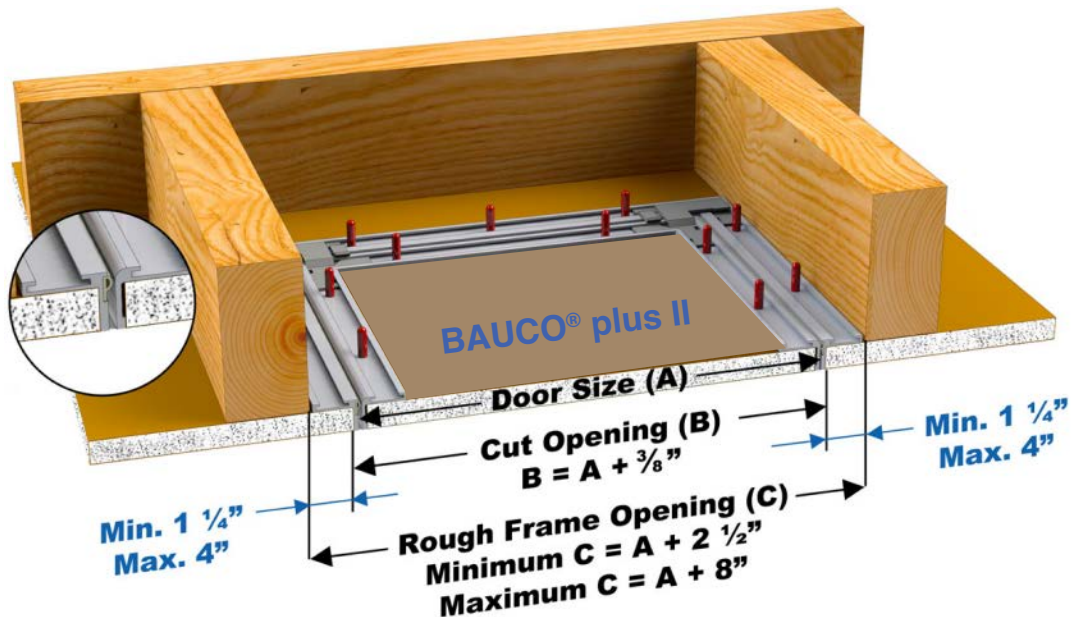
| Model Number                                                    |                       | (A)                                      | (B)                                      | (C)                                                       |
|-----------------------------------------------------------------|-----------------------|------------------------------------------|------------------------------------------|-----------------------------------------------------------|
| 1/2" Gypsum Wallboard                                           | 5/8" Gypsum Wallboard | Door Size (A)<br>Width x Length          | Cut Opening in GWB (B)<br>Width x Length | Rough Opening (C)<br>Width x Length                       |
| 20-12-0606                                                      | 20-58-0606            | 6" x 6"                                  | 6 3/8" x 6 3/8"                          | 8 1/2" x 8 1/2"                                           |
| 20-12-0808                                                      | 20-58-0808            | 8" x 8"                                  | 8 3/8" x 8 3/8"                          | 10 1/2" x 10 1/2"                                         |
| 20-12-1010                                                      | 20-58-1010            | 10" x 10"                                | 10 3/8" x 10 3/8"                        | 12 1/2" x 12 1/2"                                         |
| 20-12-1212                                                      | 20-58-1212            | 12" x 12"                                | 12 3/8" x 12 3/8"                        | 14 1/2" x 14 1/2"                                         |
| 20-12-1414                                                      | 20-58-1414            | 14" x 14"                                | 14 3/8" x 14 3/8"                        | 16 1/2" x 16 1/2"                                         |
| 20-12-1616                                                      | 20-58-1616            | 16" x 16"                                | 16 3/8" x 16 3/8"                        | 18 1/2" x 18 1/2"                                         |
| 20-12-1818                                                      | 20-58-1818            | 18" x 18"                                | 18 3/8" x 18 3/8"                        | 20 1/2" x 20 1/2"                                         |
| 20-12-2020                                                      | 20-58-2020            | 20" x 20"                                | 20 3/8" x 20 3/8"                        | 22 1/2" x 22 1/2"                                         |
| 20-12-2424                                                      | 20-58-2424            | 24" x 24"                                | 24 3/8" x 24 3/8"                        | 26 1/2" x 26 1/2"                                         |
| 20-12-2436                                                      | 20-58-2436            | 24" x 36"                                | 24 3/8" x 36 3/8"                        | 26 1/2" x 38 1/2"                                         |
| Access door sizes are based on inside dimensions, door size (A) |                       | Inside dimensions, opening in door frame | Door size (A) + 3/8"                     | Door size (A) + 2 1/2"<br>Allows 1/8" play on either side |



# BAUCO® plus II

## METRIC SIZE CHART FOR STANDARD SIZES

| Model Number                                                    |                       | (A)                                      | (B)                                      | (C)                                                       |
|-----------------------------------------------------------------|-----------------------|------------------------------------------|------------------------------------------|-----------------------------------------------------------|
| 1/2" Gypsum Wallboard                                           | 5/8" Gypsum Wallboard | Door Size (A)<br>Width x Length          | Cut Opening in GWB (B)<br>Width x Length | Rough Opening (C)<br>Width x Length                       |
| 20-12-0606                                                      | 20-58-0606            | 152 mm x 152 mm                          | 162 mm x 162 mm                          | 216 mm x 216 mm                                           |
| 20-12-0808                                                      | 20-58-0808            | 203 mm x 203 mm                          | 213 mm x 213 mm                          | 267 mm x 267 mm                                           |
| 20-12-1010                                                      | 20-58-1010            | 254 mm x 254 mm                          | 264 mm x 264 mm                          | 318 mm x 318 mm                                           |
| 20-12-1212                                                      | 20-58-1212            | 305 mm x 305 mm                          | 315 mm x 315 mm                          | 369 mm x 369 mm                                           |
| 20-12-1414                                                      | 20-58-1414            | 356 mm x 356 mm                          | 366 mm x 366 mm                          | 420 mm x 420 mm                                           |
| 20-12-1616                                                      | 20-58-1616            | 406 mm x 406 mm                          | 416 mm x 416 mm                          | 470 mm x 470 mm                                           |
| 20-12-1818                                                      | 20-58-1818            | 457 mm x 457 mm                          | 467 mm x 467 mm                          | 521 mm x 521 mm                                           |
| 20-12-2020                                                      | 20-58-2020            | 508 mm x 508 mm                          | 518 mm x 518 mm                          | 572 mm x 572 mm                                           |
| 20-12-2424                                                      | 20-58-2424            | 610 mm x 610 mm                          | 620 mm x 620 mm                          | 674 mm x 674 mm                                           |
| 20-12-2436                                                      | 20-58-2436            | 610 mm x 914 mm                          | 620 mm x 924 mm                          | 674 mm x 978 mm                                           |
| Access door sizes are based on inside dimensions, door size (A) |                       | Inside dimensions, opening in door frame | Door size (A) + 10 mm                    | Door size (A) + 64 mm<br>Allows 32 mm play on either side |



# BAUCO PLUS II SINGLE LEAF CEILING ACCESS PANEL - TOUCH LATCH

## FOR USE IN:

- ASSEMBLIES CLAD IN GYPSUM WALLBOARD 1/2" (13 mm) OR 5/8" (16 mm)
- NEW CONSTRUCTION OR REPAIRS
- ROUGH OPENINGS IN GWB WITHOUT ABUTTING STRUCTURES

## FRAME:

- RECESSED ALUMINUM EXTRUSIONS
- FRAME ACTS AS FINISHING EDGE
- 1/16" (2 mm) GAP BETWEEN FRAME AND DOOR

## STANDARD FEATURES:

- STRONG CONCEALED ALUMINUM FRAME AND HARDWARE
- CONCEALED MECHANICAL TOUCH-LATCH
- LIFT-OUT DOORS WITH SAFETY CABLES
- MOISTURE RESISTANT GWB INLAY
- PERIMETER GASKET (AIR & SMOKE TIGHT)

## HINGE:

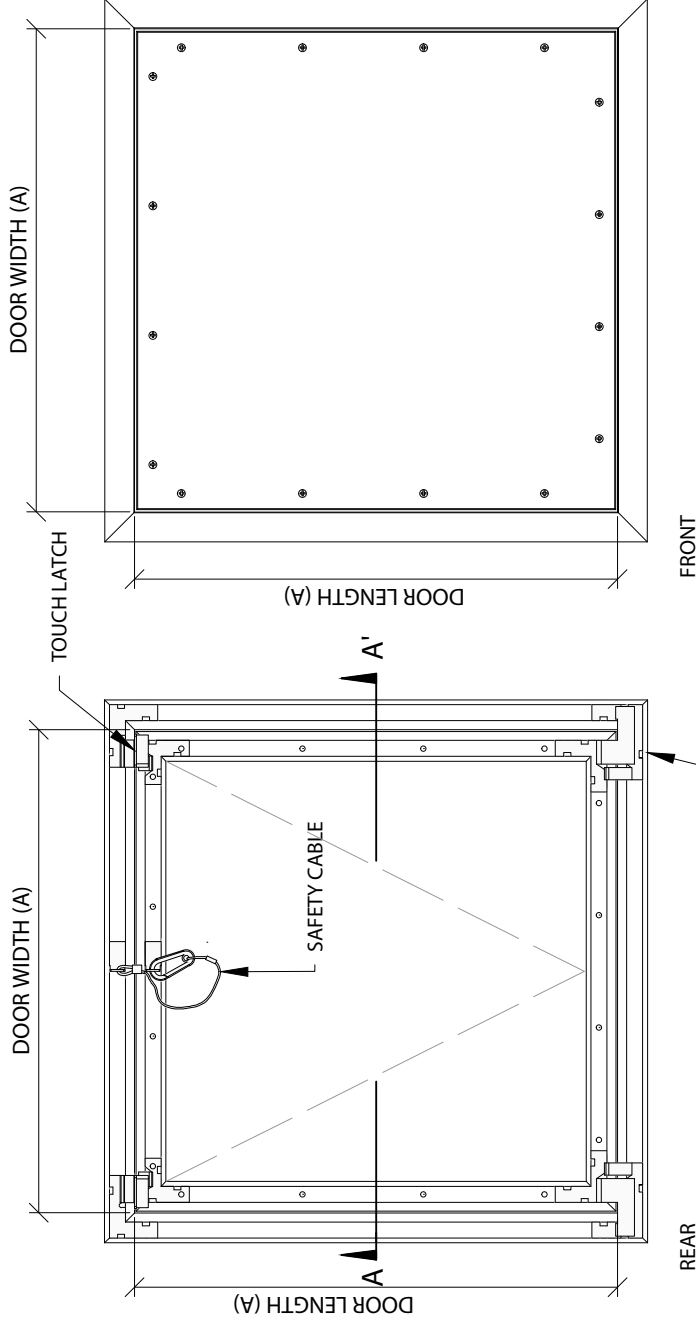
- FREE PIVOTING HINGE
- DOOR CAN BE REMOVED FOR MAXIMUM CLEARANCE

## SOUND TRANSMISSION:

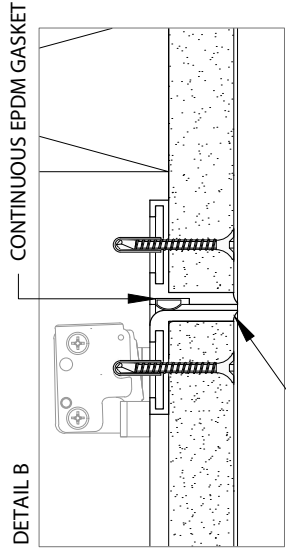
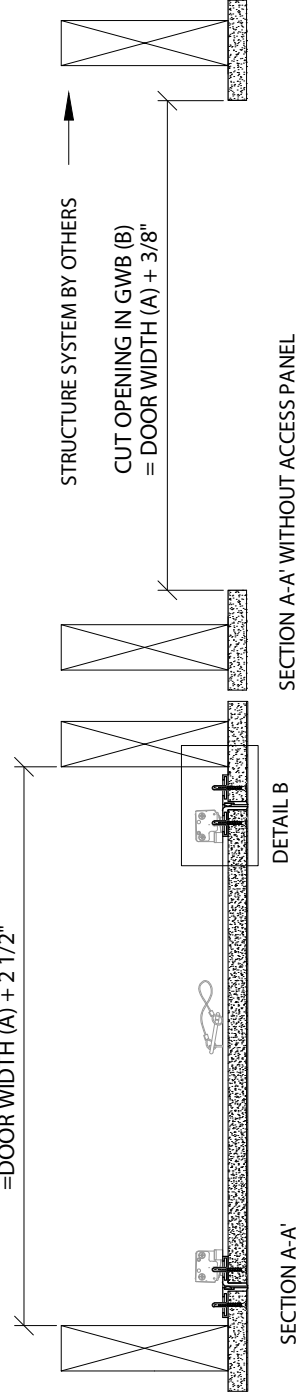
- BAUCO PLUS II ACCESS PANELS WILL NOT REDUCE THE STC RATING OF THE ASSEMBLY

## LATCH:

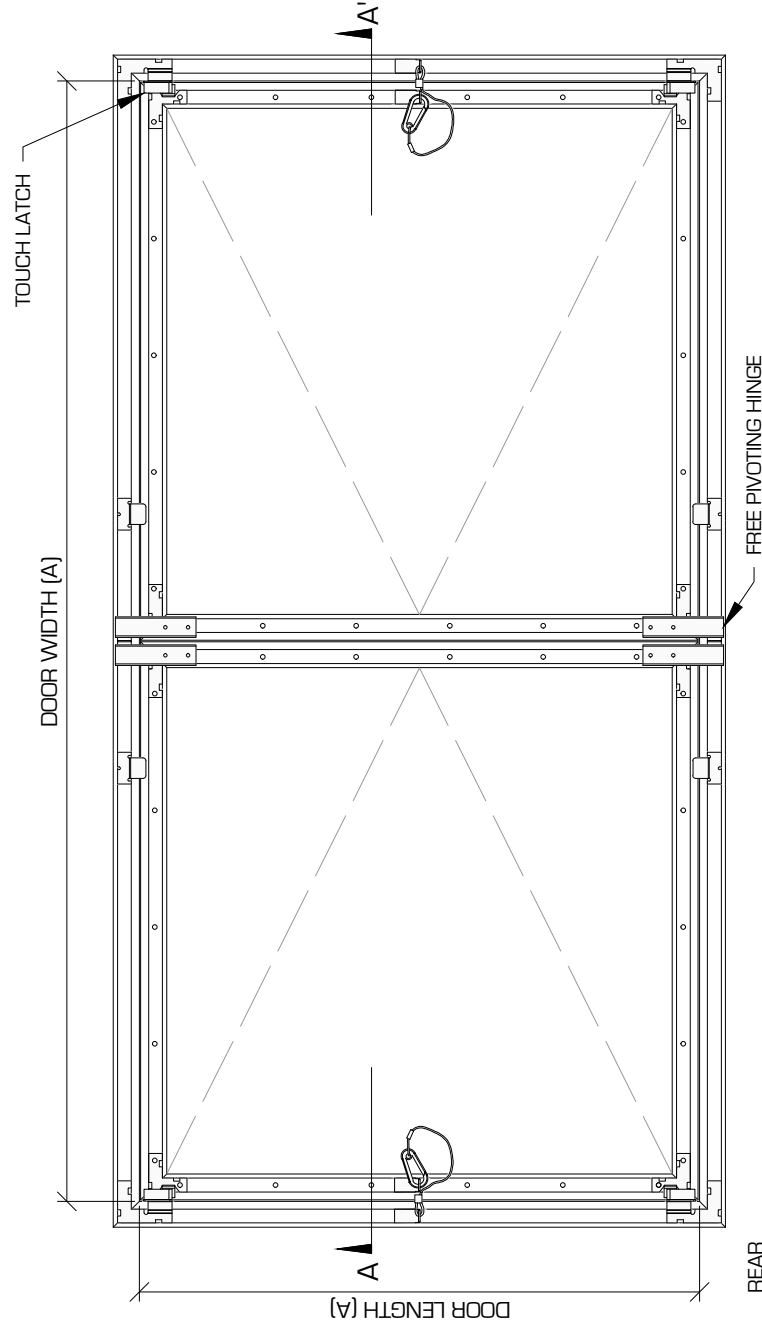
- CONCEALED TOUCH LATCH (STANDARD)
- CAM LATCH (OPTIONAL)
- TAMPER RESISTANT CAM LATCH (OPTIONAL)
- KEYED LOCK (OPTIONAL)



ROUGH OPENING (C)  
= DOOR WIDTH (A) + 2 1/2"



# BAUCO PLUS II DOUBLE LEAF CEILING ACCESS PANEL - TOUCH LATCH



**FOR USE IN:**

- ASSEMBLIES CLAD IN GYPSUM WALLBOARD 1/2" (13 mm) OR 5/8" (16 mm)
- NEW CONSTRUCTION OR REPAIRS
- ROUGH OPENINGS IN GWB WITHOUT ABUTTING STRUCTURES

**FRAME:**

- RECESSED ALUMINUM EXTRUSIONS
- FRAME ACTS AS FINISHING EDGE
- 1/16" (2 mm) GAP BETWEEN FRAME AND DOOR

**STANDARD FEATURES:**

- STRONG CONCEALED ALUMINUM FRAME AND HARDWARE
- CONCEALED MECHANICAL TOUCH-LATCH
- LIFT-OUT DOORS WITH SAFETY CABLES
- MOISTURE RESISTANT GWB INLAY
- PERIMETER GASKET (AIR & SMOKE TIGHT)

**HINGE:**

- FREE PIVOTING HINGE
- DOOR CAN BE REMOVED FOR MAXIMUM CLEARANCE

**SOUND TRANSMISSION:**

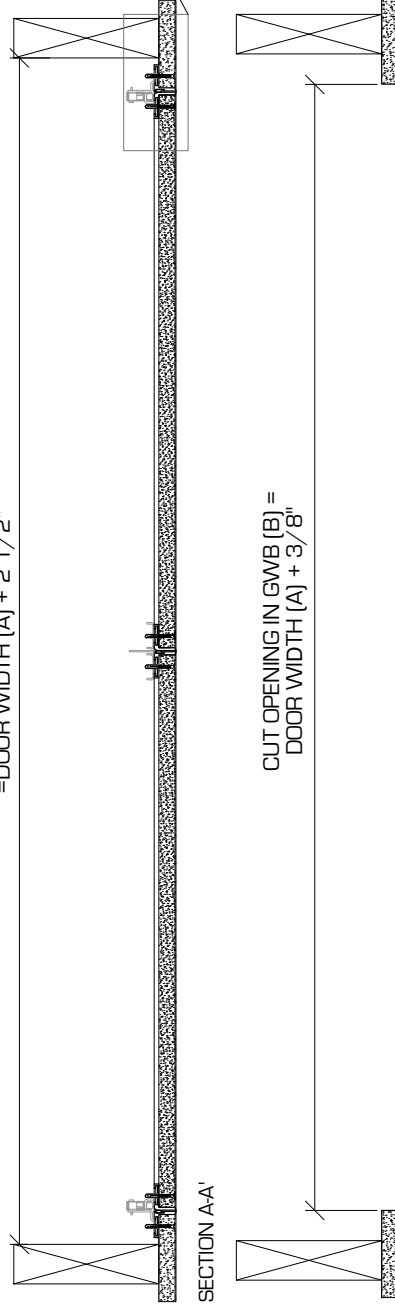
- BAUCO PLUS II ACCESS PANELS WILL NOT REDUCE THE STC RATING OF THE ASSEMBLY

**LATCH:**

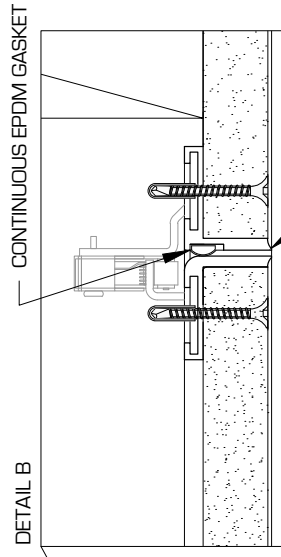
- CONCEALED TOUCH LATCH (STANDARD)
- CAM LATCH (OPTIONAL)
- TAMPER RESISTANT CAM LATCH (OPTIONAL)
- KEYED LOCK (OPTIONAL)

ROUGH OPENING (C)  
= DOOR WIDTH (A) + 2 1/2"

CUT OPENING IN GWB (B) =  
DOOR WIDTH (A) + 3/8"



DETAIL B

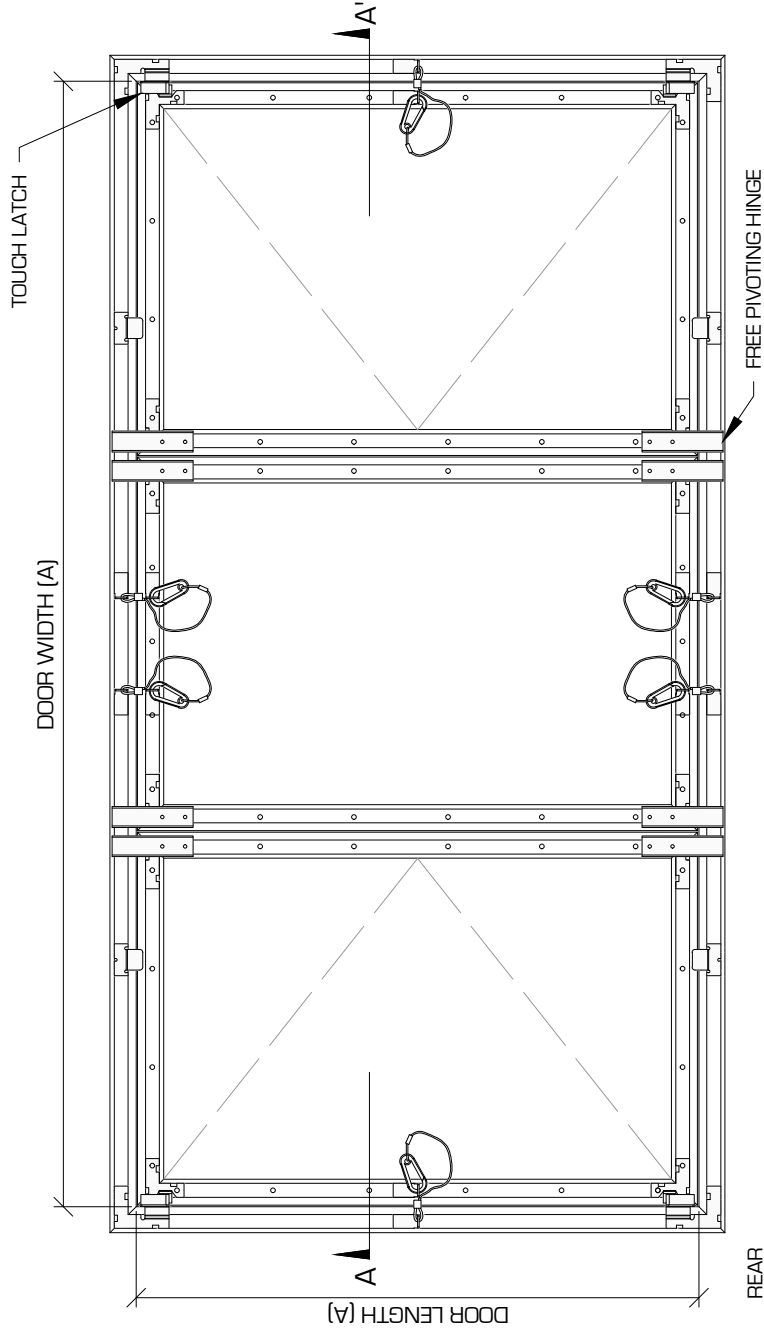


ALUMINUM FRAME ACTS AS EDGE FOR WALLBOARD FINISHING

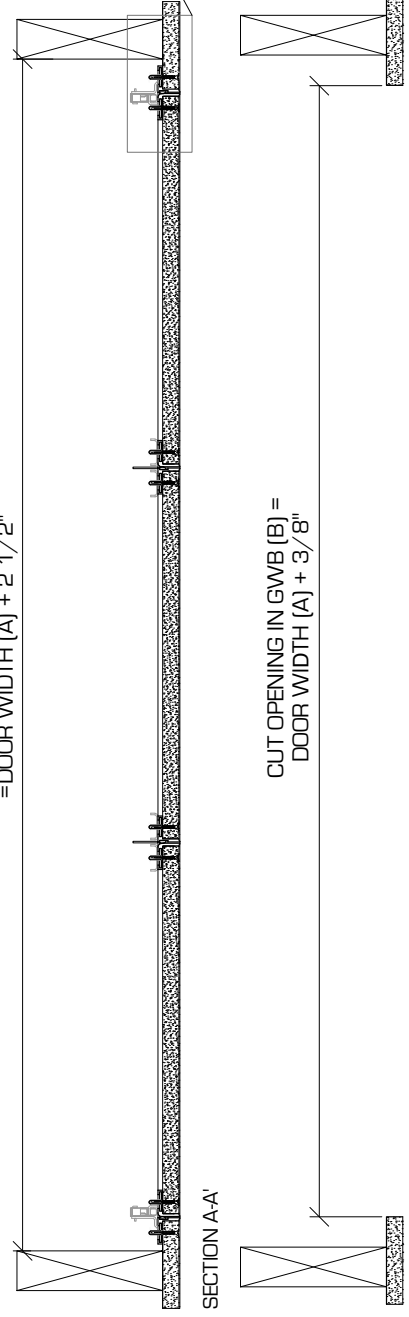
SECTION A-A' WITHOUT ACCESS PANEL



# BAUCO PLUS II THREE LEAF CEILING ACCESS PANEL - TOUCH LATCH



ROUGH OPENING (C)  
= DOOR WIDTH (A) + 2 1/2"



**FOR USE IN:**

- ASSEMBLIES CLAD IN GYPSUM WALLBOARD 1/2" (13 mm) OR 5/8" (16 mm)
- NEW CONSTRUCTION OR REPAIRS
- ROUGH OPENINGS IN GWB WITHOUT ABUTTING STRUCTURES

**FRAME:**

- RECESSED ALUMINUM EXTRUSIONS
- FRAME ACTS AS FINISHING EDGE
- 1/16" (2 mm) GAP BETWEEN FRAME AND DOOR

**STANDARD FEATURES:**

- STRONG CONCEALED ALUMINUM FRAME AND HARDWARE
- CONCEALED MECHANICAL TOUCH-LATCH
- LIFT-OUT DOORS WITH SAFETY CABLES
- MOISTURE RESISTANT GWB INLAY
- PERIMETER GASKET (AIR & SMOKE TIGHT)

**HINGE:**

- FREE PIVOTING HINGE
- DOOR CAN BE REMOVED FOR MAXIMUM CLEARANCE

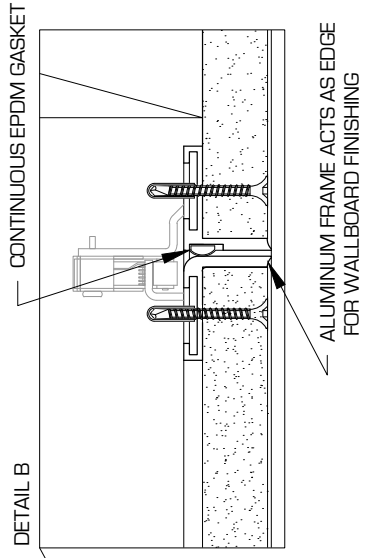
**SOUND TRANSMISSION:**

- BAUCO PLUS II ACCESS PANELS WILL NOT REDUCE THE STC RATING OF THE ASSEMBLY

**LATCH:**

- CONCEALED TOUCH LATCH (STANDARD)
- CAM LATCH (OPTIONAL)
- TAMPER RESISTANT CAM LATCH (OPTIONAL)
- KEYED LOCK (OPTIONAL)

DETAIL B



SECTION A-A' WITHOUT ACCESS PANEL

## BAUCO® plus II ARCHITECTURAL ACCESS PANEL WITH CONCEALED HARDWARE AND GYPSUM BOARD INLAY

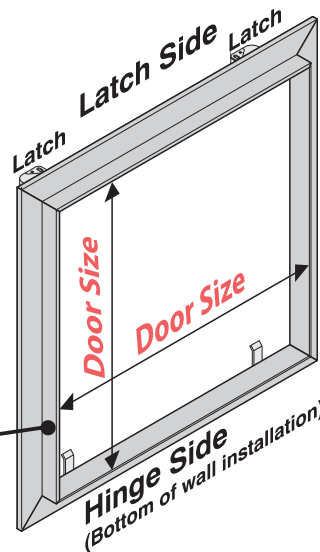
## Introduction and Key Concepts

### Access Panel Outer Frame

The dimensions of the **Door Size** (clear opening in outer frame) are used to determine the **Cut Opening** (opening in the drywall) and the minimum **Rough Frame Opening** (spacing of framing members).

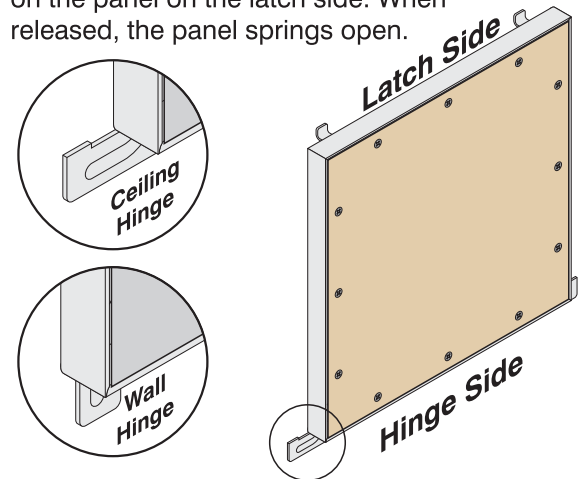
The number group following the first 4 digits in the model number is the **door size**. **Ex:** access panel with the Model Number 20-58-**1212** has a **12" x 12"** door size.

The outer frame mounts to the back of the drywall and is attached with self-drilling screws through the face of the drywall.



### Access Panel Door Leaf

The door leaf is opened by pressing on the panel on the latch side. When released, the panel springs open.



## For trouble-free installation and operation please observe the following:

- 1-The access panel outer frame must be screwed to the drywall every 4" or less with more precise attachment at the corners and through the base of all latch brackets.
- 2-The outer frame must be attached to the drywall square and straight. Frame is flexible; attach straight.
- 3-The wall or ceiling must be rigid. Blocking and or rigid hangers must ensure no flexibility or movement in drywall.
- 4-The drywall surrounding the outer frame should be flat. If screw heads protrude above the face of the framing, it is recommended that drywall shims are used to make a flat surface.

## Installation Methods

### Standard Installation

Create the rough opening according to framing guidelines. Measure framing location and note for reference. Board over opening. Precisely mark out cut opening in drywall and cut and remove. Ensure there is adequate overlapping drywall to accept outer frame. Angle outer frame through the opening and attach according to the information on page 2. Alternative methods for locating outer frame are outlined on page 2.

### Size of the Cut Opening (B)

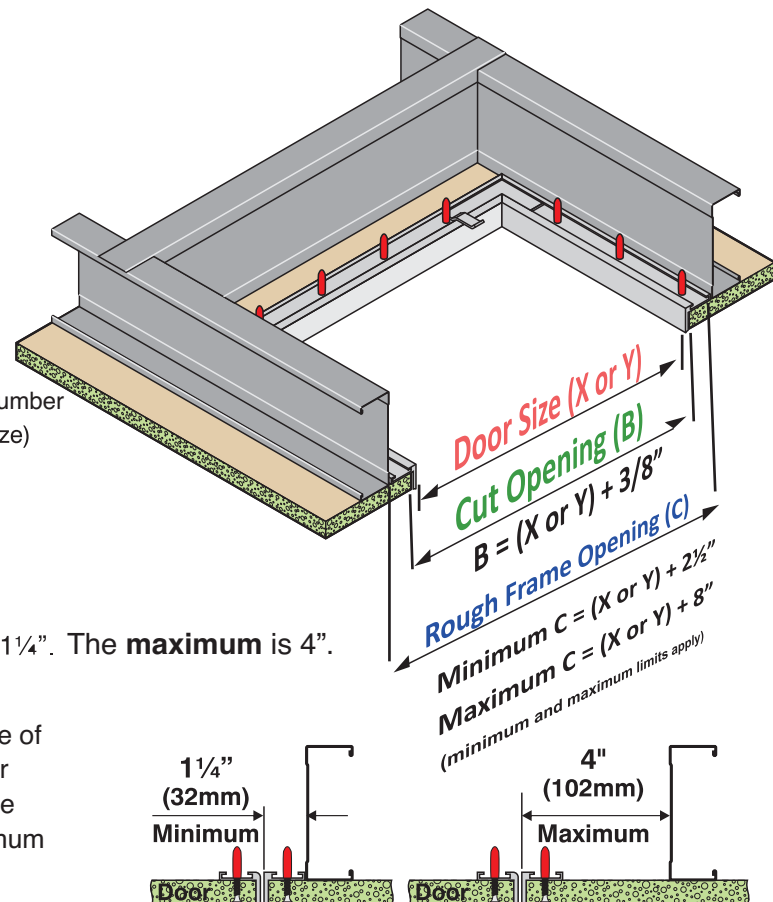
**Door Size (X or Y)** number group following first 4 digits in the model number  
The **Cut Opening (B)** is the door size **(X or Y)** + 3/8" (drywall opening size)

**EX:** A Model 20-58-**1212** with a **12" x 12"** door size needs a **12 3/8" x 12 3/8"** cut opening in the drywall.

### Size of the Minimum Rough Frame Opening (C)

The **minimum** distance from the panel opening to a stud is 1 1/4". The **maximum** is 4".

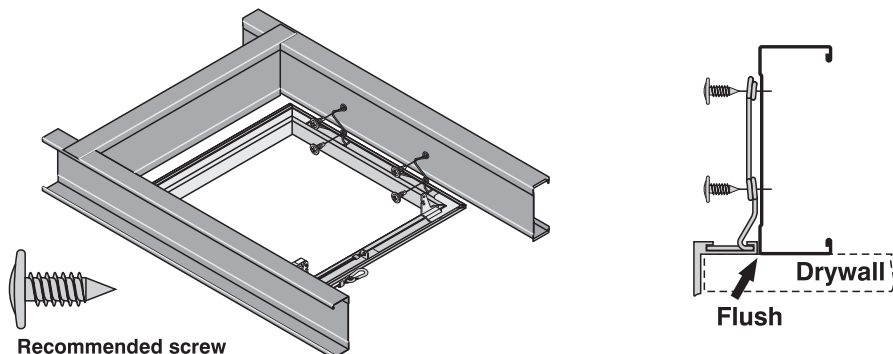
**EX:** For a Model 20-58-**1212** with a **12" x 12"** door size, the minimum spacing of the framing is 14 1/2" with 1 1/4" on either side of the opening. The maximum spacing is 20" - with 4" max. on either side of the opening. The distance to the studs does not have to be the same as long as the framing is within the maximum and minimum dimensions.



## Alternative Installation Methods

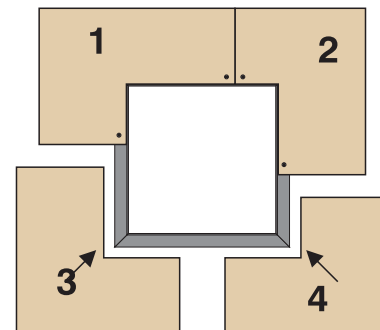
### A. Install Aids (included with large panels only; or upon request)

The panel outer frame can be hung in the rough framed opening before the drywall is in place by using Install Aids. Install Aids clip into the outer frame and are screwed or tied to framework. **After the drywall is fitted around the frame, the frame MUST be attached to drywall with SCREWS as shown in the next section.** These are an **INSTALLATION AID ONLY**



### B. During Drywall Installation

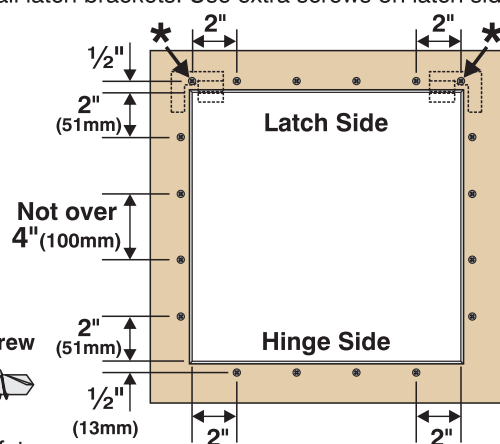
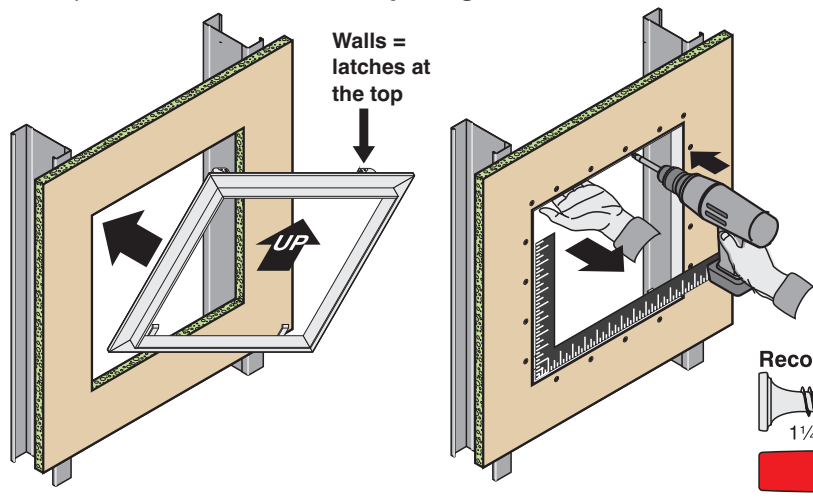
The access panel outer frame can be located resting on the back of the drywall **as the drywall is being installed.** If possible, avoid putting joints at the corners. **The frame must be attached as shown in the next section.**



## Outer Frame Installation and Panel Finishing

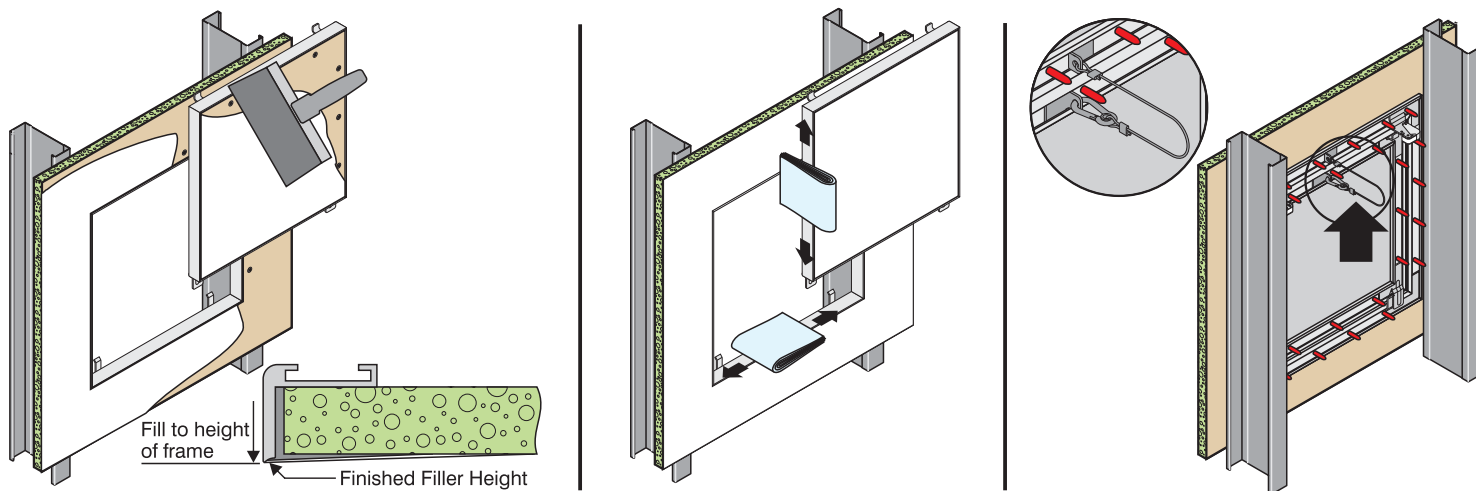
Pass the frame through the opening into position (or locate with alternative method) so outer frame rests on back of drywall. **Ensure the frame is straight and square.** Screw through the drywall into the frame of the access panel. **Correct fastener spacing must be followed**

**\*Important Fastener Placement.** At the latch side only, a screw should be fitted in line with the edge of the frame. It will go through the steel corner brackets. If multiple latches, place fasteners through the base of all latch brackets. Use extra screws on latch side.



Measurements are from the edge of the frame.

Insert door leaf and test function. Remove. Apply filler into any gaps around the outer frame, filling to the level of the raised edge. Apply filler to the door leaf. Sand and fill until desired finish is achieved. **Finished height must not be higher than edge of outer frame and door leaf frame.** Setting-type compound is recommended for the first coat. Clean excess and dust from frame and the door with a damp cloth. Prime and paint together or separately. Attach the safety cable when done.

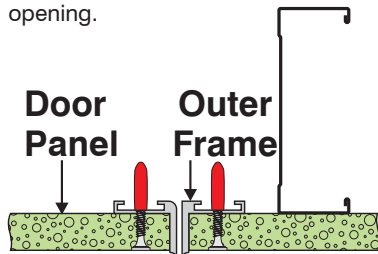


### Access Panel Outer Frame

The access panel **outer frame** mounts to the back of the drywall and is attached with self-drilling drywall screws through the face of the drywall.

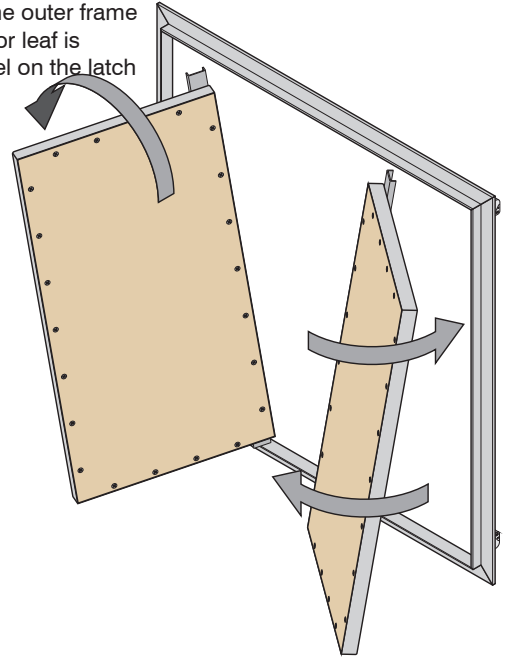
The dimensions of the **Door Size (A)** (clear opening) in the outer frame are used to determine the **Cut Opening (B)** (opening in the drywall) and the minimum **Rough Framed Opening (C)** (spacing of framing members).

The number group following the first 4 digits in the model number is the clear opening dimensions. Ex: access panel with the Model Number 20-58-4842-2 has a 48" x 42" clear opening.



### Access Panel Door Panels

Remove the door panels from the outer frame to begin the installation. The door leaf is opened by pressing on the panel on the latch side. When released, the panel springs open. Angle the open panel in order to pass through the outer frame.



### For trouble-free installation and operation please observe the following:

- 1- The access panel outer frame must be screwed to the drywall every 4" or less with more precise attachment at the corners and through the base of all latch brackets.
- 2- The outer frame must be attached to the drywall square and straight. Frame is flexible; attach straight.
- 3- The wall or ceiling must be rigid. Blocking and or rigid hangers must ensure no flexibility or movement in drywall.
- 4- The drywall surrounding the outer frame should be flat. If screw heads protrude above the face of the framing, it is recommended that drywall shims are used to make a flat surface.

## INSTALLATION METHODS

### Standard Installation- Outer Frame located after drywall

The framing members need to be positioned around the cut opening in the drywall so as to allow space for the access panel outer frame. Drywall is attached to framing and an opening is made not up to the framed opening but leaving the drywall overlapping the framing to create a lip to accept the access panel outer frame. The access panel outer frame is angled through the opening and positioned against the back of the drywall. Proper attachment guide on the back page. Alternative methods are outlined on the back page.

#### Size of the Cut Opening (B) in drywall

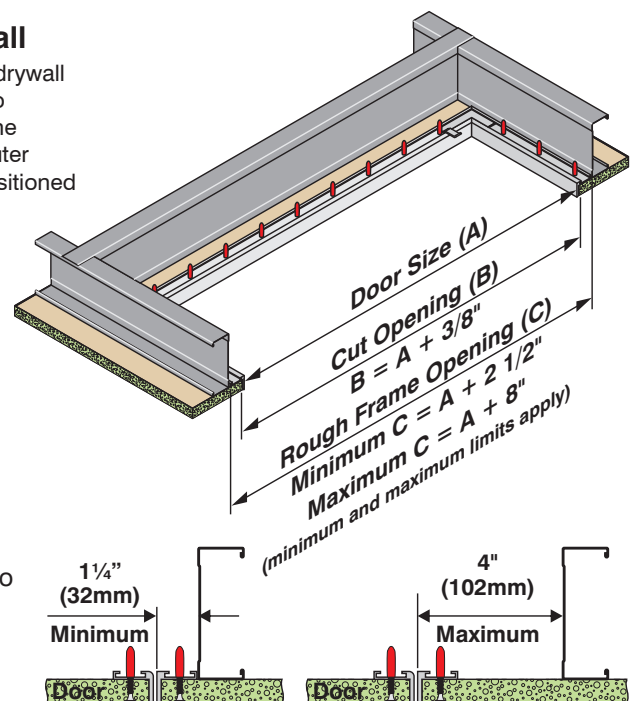
**Door size (A)** is the last four digits of the model number. For example, a Model 20-58-2436 has a 24" x 36" door size. The **Cut Opening (B)** is the door size + 3/8". A Model 20-58-2436 with a 24" x 36" door size needs a 24 3/8" x 36 3/8" cut opening in the drywall.

#### Rough Frame Opening (C)

The **minimum** distance from the panel opening to any framework is 1 1/4". The **maximum** is 4".

The distance from the cut opening to any framework does not have to be the same as long as the framing is within the maximum and minimum dimensions.

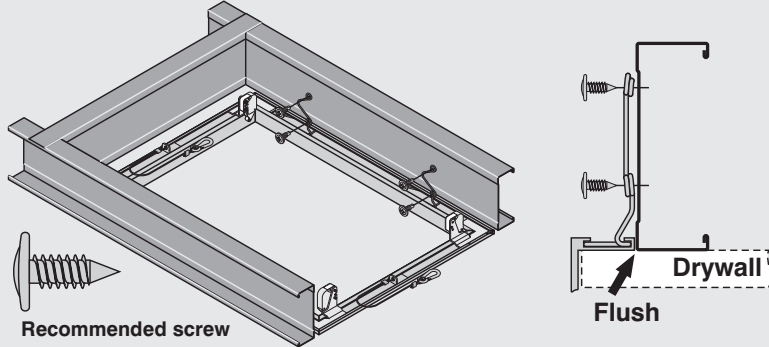
Example: For a model 20-58-6030-2 with a 60" x 30" clear opening: The minimum spacing of the framing members is 62 1/2" x 32 1/2".





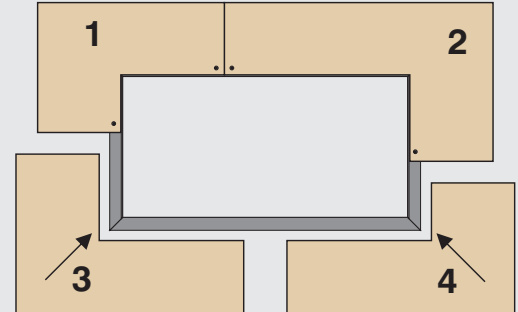
### Alternative Installation Methods

Stud Anchors (included with large panels; otherwise upon request)  
 The panel outer frame can be hung in the rough framed opening before the drywall is in place by using the Stud Anchors. Stud Anchors clip into the outer frame and are screwed or tied to framework.  
 After the drywall is fitted around the frame, the frame must be attached as shown in the next section. Stud anchors are an installation aid only.



### During Drywall Installation

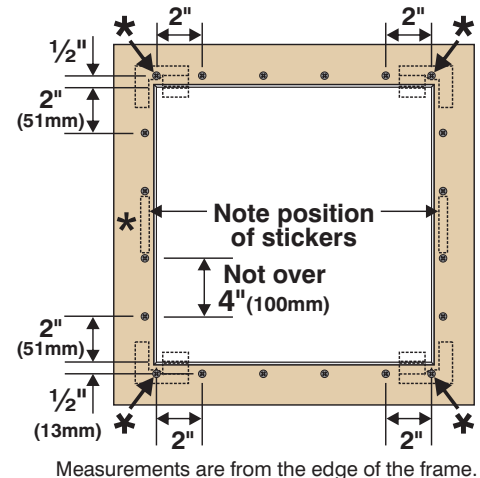
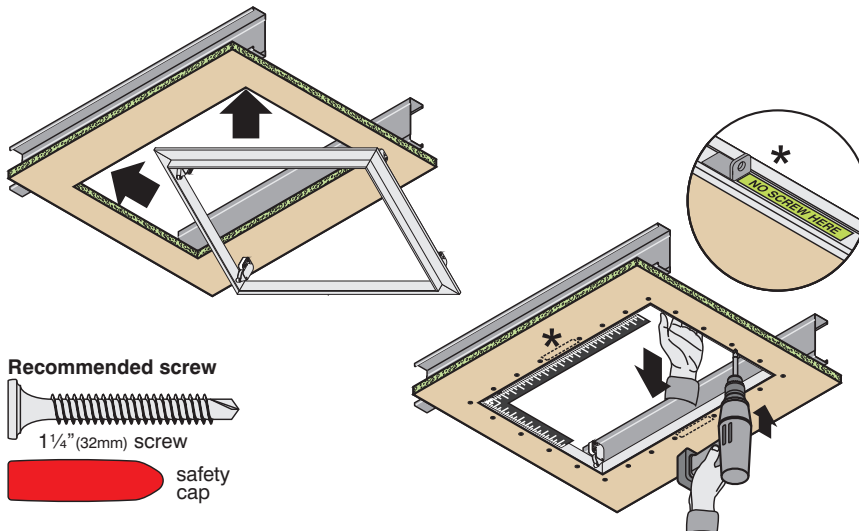
The access panel outer frame can be located resting on the back of the drywall as the drywall is being installed. If possible, avoid putting joints at the corners. **The frame must be attached as shown in the next section.**



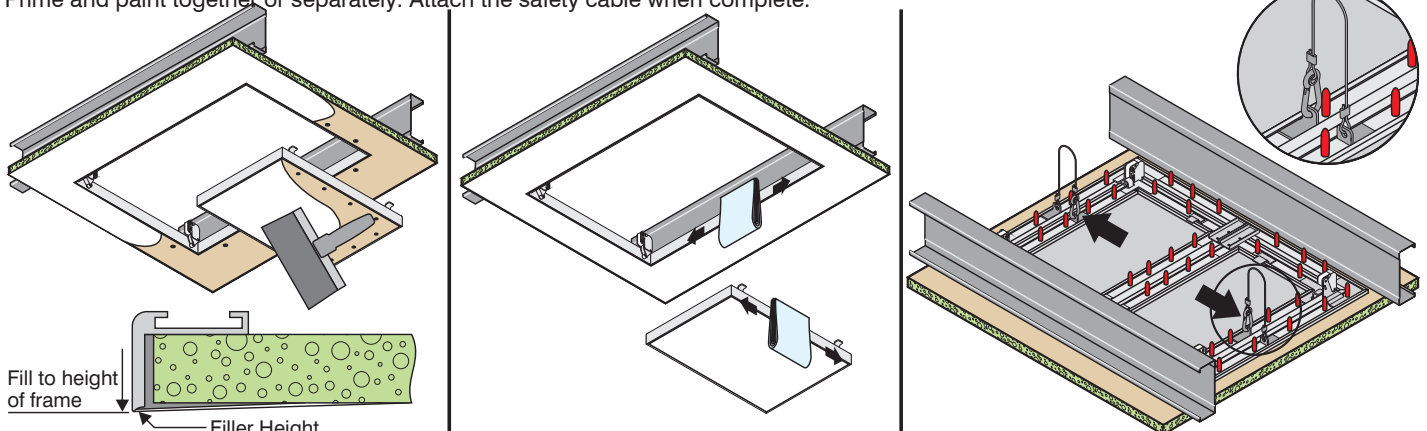
### FRAME INSTALLATION AND FINISHING

The access panel outer frame is angled through the opening into position (or locate with alternative method). The outer frame rests on back of drywall. **Ensure the frame is straight and square.** Screw through the drywall into the frame of the access panel. **Correct fastener spacing** must be followed. Note where not to place screws.

**\* Important Fastener Placement.** At latch sides, a screw should be fitted in line with the edge of the frame. It will go through the steel corner brackets. If multiple latches, place fasteners through the base of all latch brackets. Use extra screws on latch side. **Screws spaced not more than 4".**



Insert door leaf and test function. Remove. Apply filler into any gaps around the outer frame, filling to the level of the raised edge. Apply filler to the door leaf. Sand and fill until desired finish is achieved. Finished height must not be higher than edge of outer frame and door leaf frame. Setting-type compound is recommended for the first coat. Clean excess and dust from frame and the door with a damp cloth. Prime and paint together or separately. Attach the safety cable when complete.





**Project Name:**  
**Project Number:**

**Item Number:**  
**Item Description:**

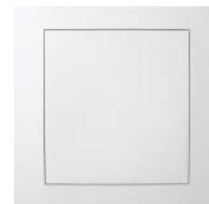
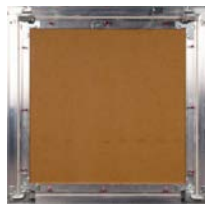
Manufacturer: Bauco Access Panel Solutions Inc.  
 Address: 834 Devonshire Road, Victoria, BC Canada V9A 4T4  
 Telephone: 1-250-592-0033 Toll-free Telephone: 1-877-592-0033  
 Fax: 1-250-592-7587 Toll-free Fax: 1-877-592-7587  
 Email: info@accesspanelsolutions.com

**Model Number:** 20-12-\_\_\_\_ \*series or 20-58-\_\_\_\_ \*series

**Model Name:** **BAUCO® plus II** access panel for drywall

**Description:** Virtually invisible access panel installs flush with wall and ceiling finishes. Finished panels leave not more than a 1/16" shadow/gap on finished surfaces. Hardware-free finish, opens with concealed touch latches. May be removed for full access, complete with safety catches. Suitable for new construction and repairs. Panels arrive ready for installation with factory installed gypsum board inlay. Door panel receives the same finish as the surrounding surface. Aluminum extrusion with gypsum board installed, no corrosive hardware, safety devices, installation kit, and bracing where needed. Standard: touch latch. Options: keyed latch, special board, acoustic backing. Panel drywall inlay shall equal the same specifications as wall and ceilings.

**Finishing:** No bead required. Feather mud so that after the 3<sup>rd</sup> layer no irregularities shall be visible to the unaided eye at a distance of 1.5 m.



**Dimensions:** Standard sizes: 6" x 6", 8" x 8", 10" x 10", 12" x 12", 14" x 14", 16" x 16", 18" x 18", 20" x 20", 24" x 24", 24" x 36".  
We can manufacture custom sizes with short lead times.

**Sizing:** For a proper fit, the rough opening has to be 2 1/2" wider and longer than the door size, to a maximum of 8".  
Cut opening in the gypsum wallboard will be the door size + 3/8".

**Notes:** \* Model Numbers: 12 = 1/2" drywall, 58 = 5/8" drywall.  
\*\* Last 4 digits indicate panel size: 20-58-1818 = 18" x 18" square panel.

## LEED FOR BAUCO<sup>®</sup> plus II ACCESS PANELS WITH GYPSUM BOARD INLAY

Our team is committed to operating our facilities with environmentally friendly processes, as well as manufacturing our BAUCO<sup>®</sup> access panels which help architects, dealers, distributors, and end users to achieve the highest possible level of certification. We are ready to assist in your LEED certification documentation.

### MANUFACTURING LOCATION

BAUCO<sup>®</sup> plus , BAUCO<sup>®</sup> plus II , BAUCO<sup>®</sup> air , and BAUCO<sup>®</sup> rondo access door products are manufactured in Victoria, British Columbia, Canada.

### MATERIALS

The gypsum wallboard inlay shipped with our doors is manufactured by CGC Inc., a member of the U.S. Green Building Council. Other brand products are available upon request. CGC Inc. manufactures the USG Sheetrock Gypsum Panels in Rainer, OR.

### RECYCLING CONTENT

| Material Content by Weight | % of Total | Post-industrial Recycled Content | Post-consumer Recycled Content | Total Recycled % |
|----------------------------|------------|----------------------------------|--------------------------------|------------------|
| Aluminum Extrusion         | 23%        | 25%                              |                                | 5.8%             |
| Steel Hardware*            | 7%         | 50%                              |                                | 3.5%             |
| Gypsum Wallboard           | 70%        |                                  | 21%                            | 14.7%            |
| Total Weight               | 100%       |                                  |                                | 24%              |

\* Vendors report recycling content up to 90%, but this figure can vary

The above data refers to a 24" x 24" (610mm x 610mm) panel.

Other sizes present a similar distribution.

## SOUND AND SMOKE TRANSMISSION RESISTANCE

In the 15 years of supplying to construction projects across North America, we have had numerous calls from acoustical engineers to use our doors because of their superior sound transmission resistance. The engineers' assessment was based on two observations in the design of our panels: Firstly, the gasket in the frame prevents almost all air-flow and thereby limits the transmission of sound. Secondly, the mass of the gypsum board inlay supplied with our access panels is identical to the mass of the surrounding ceiling/wall and thereby ensures that the acoustic properties are the same.

We frequently modify access panels in consultation with customers and consultants to further decrease sound transmission properties. Our standard procedure on those cases is to substitute the regular gypsum board inlay with an acoustically enhanced gypsum board (such as Quietrock or SilentFX). We have also applied a second layer of gypsum wallboard or even a layer of barium-rubber matting attached to the back of the door (e.g. Fallsview Casino in Niagara Falls and the LDS Temple in Vancouver, BC).

### TESTING

In March 2010, to more formally support the benefits implied by acoustical engineers, we asked the acoustical engineers at Wakefield Acoustics of Victoria, BC, to conduct an Apparent Sound Transmission Class Test on our access panel. Compared to a wall with our access panel, the wall with our 24" x 24" BAUCO® plus II door (single layer of 5/8" gypsum) performed just as well, achieving an ASTC value of 35 (consultant's report available upon request).

We further have independent testing carried out in Germany, which tests for air/smoke penetration in building envelopes under pressure. The test is commonly used to assess exterior windows. The results show that the access panel achieves a rating of "Class 4", the highest possible rating for an exterior window. The access panel is therefore deemed to be "air-tight". (Independent testing authority's report available upon request.)

Options for modification of BAUCO® plus II access panels (see also data table below):

- Second layer of gypsum wallboard laminated to the back of the door to increase mass
- Barymat 5 barium loaded rubber matt attached to either 1/2" or 5/8" gypsum board inlay
- Acoustically enhanced gypsum board, 1/2" or 5/8", in regular BAUCO® plus II frame.

### MATERIAL COMPARISON DATA

| Comparison Material                     | Material Weight lbs/sq ft | Comparative STC* |
|-----------------------------------------|---------------------------|------------------|
| Sheetrock 1/2"                          | 1.8                       | 30               |
| Sheetrock 5/8"                          | 2.3                       | 34               |
| Barymat 5 1/8" (0.07")                  | 1.0                       | 24               |
| Acoustically enhanced gypsum board 1/2" | 2.2                       | 49 - 68          |
| Acoustically enhanced gypsum board 5/8" | 2.7                       | 51 - 72          |

\* Relative values from various sources. Most based on the use of the material in a wood stud wall. Barymat 5 value for material only.

Sources: German test report, Wakefield Acoustics report, Quietrock data-sheet, Sheetrock data-sheet, Barymat 5 data-sheet.