

BOMBARDIER INC., PAR L'INTERMÉDIAIRE DE SES GROUPES, DIVISIONS ET/OU FILIALES CORPORATIVES, FOURNIT LES PRÉSENTES INFORMATIONS AU GOUVERNEMENT À TITRE CONFIDENTIELL CES INFORMATIONS ONT UNE TENEUR CONFIDENTIELL, AVEC DROITS DE PROPRIÈTÉ, ET NOUS LES CONSIDÉRONS EXCLUES DE L'APPLICATION DE TOUTE LOISUR L'ACCÈS À L'INFORMATION, ELLES PEUVENT AUSSI CONSTITUER DES SECRETS INDUSTRIELS DE NOTRE SOCIÉTÉ OU DE TIERCES PARTIES. LA DIVULGATION PUBLIQUE DE CES INFORMATION NURAIT À BOMBARDIER INC. OU À DES TIERCES PARTIES. TOUTE INTENTION DE LES DIVULGUER EN TOUT OU EN PARTIE DEVRA ÈTRE SIGNIFIÉE À L'AVANCE ET PAR ÉCRIT AU VICE-PRÉSIDENT SERVICES JURIDIQUES, BOMBARDIER AÉRONAUTIQUE.

BOMBARDIER INC., BY ITS GROUPS, DIVISIONS AND/OR CORPORATE SUBSIDIARIES, PROVIDES THIS INFORMATION TO THE GOVERNMENT IN CONFIDENCIE. THIS IS PROPRIETARY CONFIDENTIAL. INFORMATION WHICH WE CONSIDER EXCLUDED FROM THE APPLICATION OF ANY ACCESS TO INFORMATION LAWS AND MAY ALSO CONSTITUTE TRADE SECRETS OF OUR COMPANY OR THIRD PARTIES, PUBLIC RELEASE OF THIS INFORMATION WOULD BE HARMFUL TO BOMBARDIER INC. OR THIRD PARTIES. ANY INTENTION TO DISCLOSE SUCH INFORMATION, OR PART THEREOF, MUST BE NOTHFIED IN ADVANCE AND IN WRITING TO THE VICE-PRESIDENT LEGAL SERVICES, BOMBARDIER AEROSPACE.

LES INFORMATIONS AINSI QUE LES DONNÉES ET DESSINS TECHNIQUES DIVULGUÉS DANS LES PRÉSENTES SONT LA PROPRIÉTÉ EXCLUSIVE DE BOMBARDIER INC. ET/OU COMPORTENT DES DROITS DE PROPRIÉTÉ APPARTENANT À AUTRUI ET NE PEUVENT ÉTRE DIVULGUÉS À QUICONQUE NI UTILLISÉS OU REPRODUITS PAR QUI QUE CE SOIT SANS LE CONSENTEMENT ÉCRIT DE BOMBARDIER INC. DANS TOUS LES CAS OÙ BOMBARDIER INC. CONSENT À LEUR DIVULGATION, LEUR DIFFUSION OU LEUR REPRODUCTION, LE PRÉSENT AVIS DE PROPRIÉTÉ INTELLECTUELLE AINSI QUE L'AVIS ÉNONCÉ SUR CHAQUE PAGE DES PRÉSENTES DEVRA Y ÉTRE INDIQUÉ DE LA MÊME FAÇON, LES INFORMATIONS CONTENUES AUX PRÉSENTES PEUVENT AUSSI ÉTRE SOUMISES AUX LOIS RELATIVES À L'EXPORTATION. IOUTE EXPORTATION OU RÉ-EXPORTATION DE DONNÉES SANS AUTORISATION EST INTERDITE.

THE INFORMATION, TECHNICAL DATA AND DESIGNS DISCLOSED HEREIN ARE THE EXCLUSIVE PROPERTY OF BOMBARDIER INC. AND/OR CONTAIN PROPRIETARY RIGHTS OF OTHERS AND ARE NOT TO BE USED, REPRODUCED OR DISCLOSED TO OTHERS WITHOUT THE WRITTEN CONSENT OF BOMBARDIER INC. it consent to disclosure, release or reproduction is provided by bombardier INC., this proprietary information notice and the notice set forth on each page of this document shall appear in such full or partial disclosure, release and/or reproduction, the information contained in this document may also be controlled by export control laws, unauthorized EXPORT OR RE-EXPORT OF ANY DATA IS PROHIBITED.

D.3363-25 REV 2004-10



BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01- 04-18
DESIGN GUIDE	REVISION:	Е
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

Revision History

REVISION	DATE:	PREPARED BY:	CHECKED BY:	APPROVED BY:	REMARKS:
	2015-05-07	A. Lemaitre			
А	2015-07-02	A. Lemaitre			
В	2015-09-17	A. Lemaitre			
С	2015.12.15	A. Lemaitre			
D	2016.04.15	A. Lemaitre			
Е	2016.10.24	S. Morissette			

BOMBARDIER the evolution of mobility	Guide No:	BG-7700-01- 04-18
DESIGN GUIDE	REVISION:	Е
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

Table of Contents

1. (Cabin	netry	<i>y</i>	1
	1.1	Hir	nge Installation	1
	1.1	.1	Blum Hinges	1
			Dettmer Hinge	
	1.2	Too	e-Kick	5
	1.3	Bu	llnose And Countertop Build-up	7
			ansparent Enclosure	



CABINETS INTERIOR - HINGE INSTALLATION

DESIGN GUIDE

GUIDE NO:

BG-7700-01-

E

04-18

REVISION:

DATE: 2016-10-12

List of Tables

Table 1 – Blum hinge composition	1
Table 2 – Blum hinge and mounting plate cutout location & dimension	3



CABINETS INTERIOR - HINGE INSTALLATION

DESIGN GUIDE

GUIDE NO:

BG-7700-01-04-18

REVISION:

DATE:

E 2016-10-12

List of Figures

Figure 1 – Door configuration	1
Figure 2 – Hinges per door in relation to door height and weight	2
Figure 3 – Blum hinge and mounting plate installation	3
Figure 4 – Toe-kick, edgefiller location.	5
Figure 5 – Toe-kick dimensions	6
Figure 6 – Toe-kick installation	7
Figure 7 – Transparent enclosure, bonded	7
Figure 8 – Transparent enclosure, mechanical coupled	7

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	Е
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

1. CABINETRY

1.1 HINGE INSTALLATION

1.1.1 Blum Hinges

Multiple types of Blum hinges are used for the Global 7000 & 8000 as indicated in <u>Table 1</u> depending on door position in relation to fix panel in which the hinge is installed, refer to <u>Figure 1</u>.

Door Configuration	Arm + Boss	Mounting Plate	Cap Cover	Arm Cover	Damper
Overlay door with open storage	71B3550	173H7130		70.1663	
Overlay twin door open storage	71B3650	-		70.1003	
Overlay door with molding and with open storage	71B9550	173H7130			
Overlay door with drawer	71T7500N	173H7130	70T3504	70.1503	-
Flush door application	79B9550	173H7130			
Inset door with open storage (95°)	71B9750	173H7100		70.1663	
Inset door with open storage (110°)	71B3750	173H7100		70.1003	
Inset door with open storage (170°)	71T6650	175H7190		70.7503	973A6000

TABLE 1 - BLUM HINGE COMPOSITION

Additionally, if door panel + outboard finish is less than 0.510" thick, Hinge Cup Spacer 70T3507.21 needs to be used in order to clear the latch from the inboard skin of the door panel.

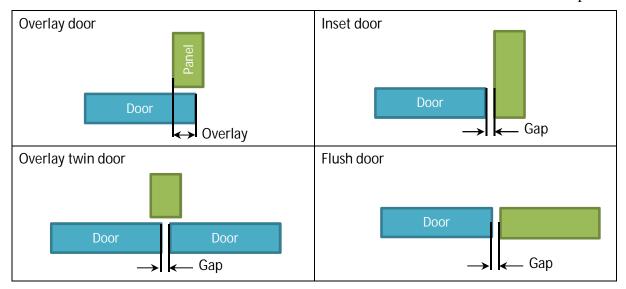


FIGURE 1 - DOOR CONFIGURATION

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	E
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

The number of hinges per door is defined by the height and weight of the finished door as shown in <u>Figure 2</u>. For most application, and as a general rule, two (2) hinges will be needed with exception for the large doors on wardrobes where three (3) hinges are required.

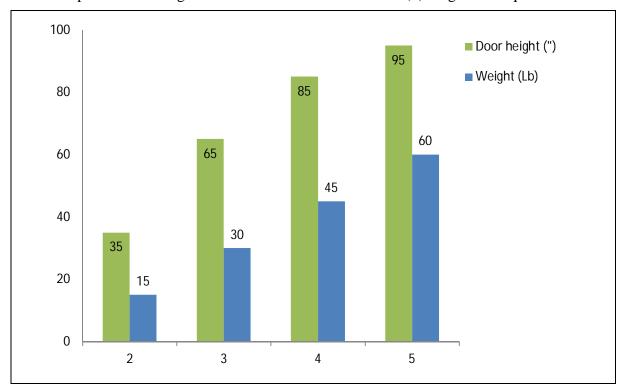


FIGURE 2 - HINGES PER DOOR IN RELATION TO DOOR HEIGHT AND WEIGHT

As per Blum recommendation, the distance between the top and bottom hinges must be greater than the width of the door.

Mounting plates from the 173H series are installed with two (2) screws B0201047-08-8K and two (2) inserts TYE2001A08-14BRX97. Mounting plates from the 175H series needs additional hardware with one (1) TYE2334-08A3RX97 insert and one (1) screw B0201047-08-8K.

All hinges are set in the door panel using two (2) screws B0201047-06-8K and two (2) inserts TYE2001A06-14BRX97

The installation pattern for both mounting plate and hinges is shown in Figure 3.

Notes: B0201047 are Flat 100° head screws, Blum hinges dimension are in metric and therefore countersunk angle is 90° . Even this is not mechanically correct, using Flat 100° head screws with a 90° countersunk angle will be acceptable for this application.

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	E
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

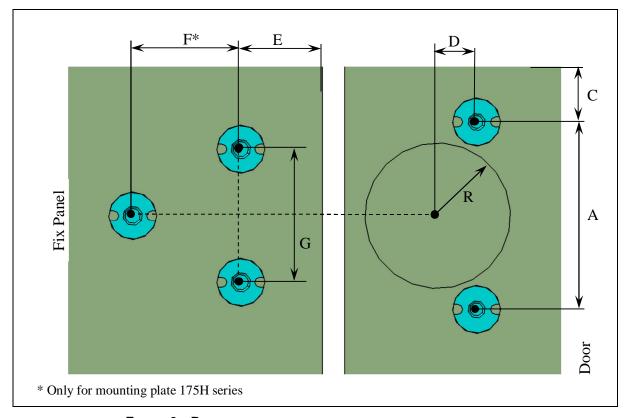


FIGURE 3 – BLUM HINGE AND MOUNTING PLATE INSTALLATION

Dimensions in <u>Table 2</u> are given from panel edges (without finish) – except E - for a gap as indicated in Design Guidelines <u>BG-7700-01-04-13</u> and finishes given in Design Guidelines <u>BG-7700-01-04-03</u> Depending finish and configuration, E may vary and be adjusted accordingly.

Hinge	А	С	D	R	E	F	G
71B3550							
71B3650					37mm		
71B9550					~1.457"		
71T7500N		Refer to C in				-	
79B9550	45mm ~1.772"	Design Guidelines BG-7700-	9.5mm ~0.374"	17.5mm ~0.689	21.5mm 0.846"		32mm ~1.26″
71B3750		01-04-08			T + 38.5mm		
71B9750					T + ~1.516"		
71T6650						26mm ~1.023"	

TABLE 2 - BLUM HINGE AND MOUNTING PLATE CUTOUT LOCATION & DIMENSION

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	E
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

In order to validate the door motion and avoiding any interference during door deployment, hinges are available with their proper kinematics; refer to <u>BLUM Hinges Kinematics</u> <u>Methodology</u> to know how to use those models. If a reference of kinematics is missing, consult Std Parts group.

1.1.2 Dettmer Hinge

TBD

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	Е
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

1.2 TOE-KICK

Toe kicks are made of a 0.25" fiberglass honeycomb panel (<u>BAMS 831-004</u> Type 1) featuring a cut-out to allow air flow. Panel edges will be filled with edge filler as shown in <u>Figure 4</u> and painted.

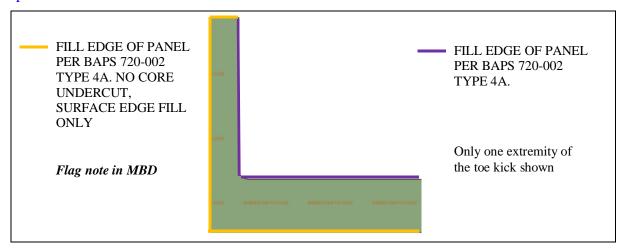


FIGURE 4 - TOE-KICK, EDGEFILLER LOCATION

Four grills made from PCD G25013947 are used to visually close the opening. Those grills are held in place by using supports G25013949 & G25013950. Support G25013950 is attached to panels with two (2) inserts TYE2001A08, two (2) screws B0201081CK08-6 and two (2) washers NAS620A8L. Support G25013949 is clipped on support G25013950.

Toe kick's dimension should be as shown in <u>Figure 5</u>.

BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	E
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

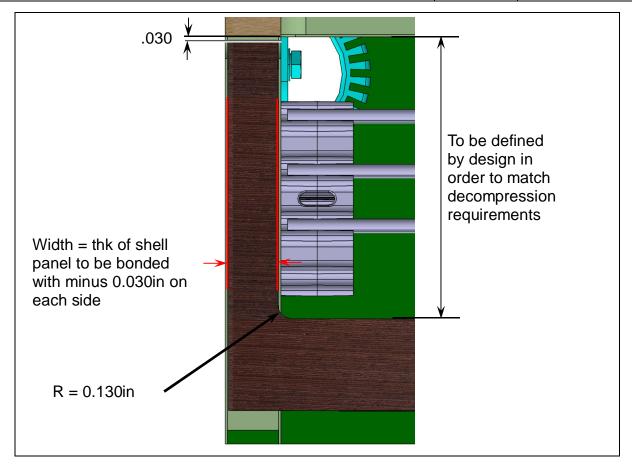
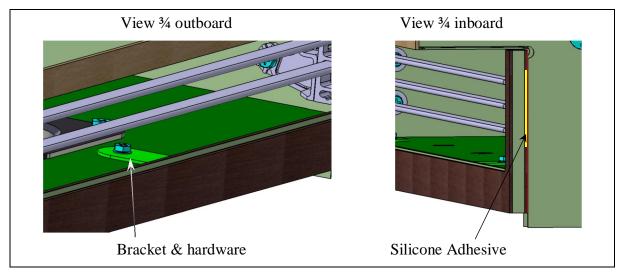


FIGURE 5 - TOE-KICK DIMENSIONS

Toe-kick is held in place by using two (2) brackets (G25007635) glued to the panel as indicted in Design Guidelines <u>BG-7700-01-04-02</u>. Each bracket connects with the floor panel using a screw (B0201081CK08-6) and an insert (TYE2001A08). Each extremity of the Toe-Kick is bonded to the cabinet shell using Silicone adhesive (<u>BAPS 700-004</u> Type 2) as shown in <u>Figure 6</u>.



BOMBARDIER the evolution of mobility	GUIDE NO:	BG-7700-01-04-18
DESIGN GUIDE	REVISION:	E
CABINETS INTERIOR - HINGE INSTALLATION	DATE:	2016-10-12

FIGURE 6 - TOE-KICK INSTALLATION

1.3 BULLNOSE AND COUNTERTOP BUILD-UP

The countertop and bullnose shall be designed as per the related PCD drawing.

1.4 TRANSPARENT ENCLOSURE

Transparent enclosure are made of polycarbonate and are mainly used to mainly for two applications:

- See-thru door
- Light diffuser

For transparent enclosure on door, material used is clear MRAC polycarbonate and it can be bonded to a supportive part – panel or piece made of rigid foam - as indicated in Design Guidelines BG-7700-01-04-02.

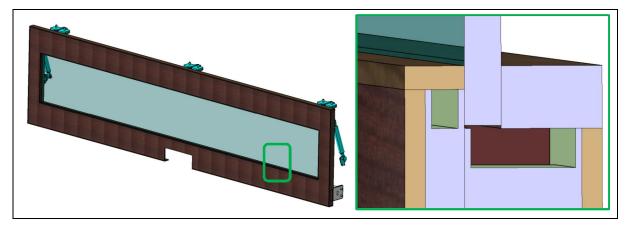


FIGURE 7 - TRANSPARENT ENCLOSURE, BONDED

When used as a light diffuser, a white semi-transparent polycarbonate piece of 0.060in thick is required. Installation can be done in the same way as for a See-thru door or it can be mechanically coupled to other elements with hardware.

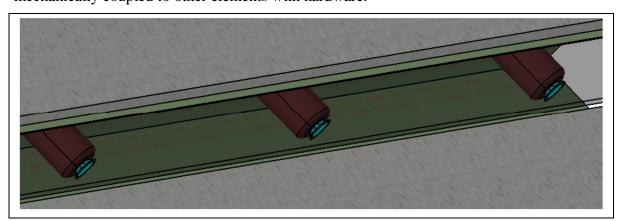


FIGURE 8 - TRANSPARENT ENCLOSURE, MECHANICAL COUPLED