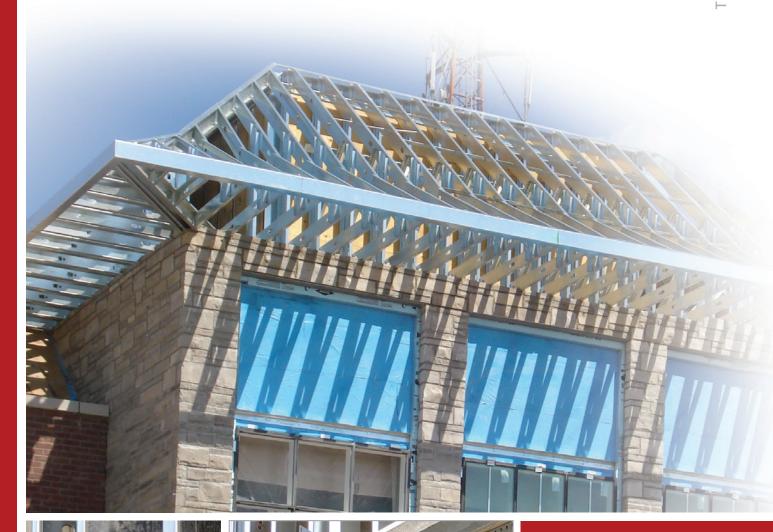
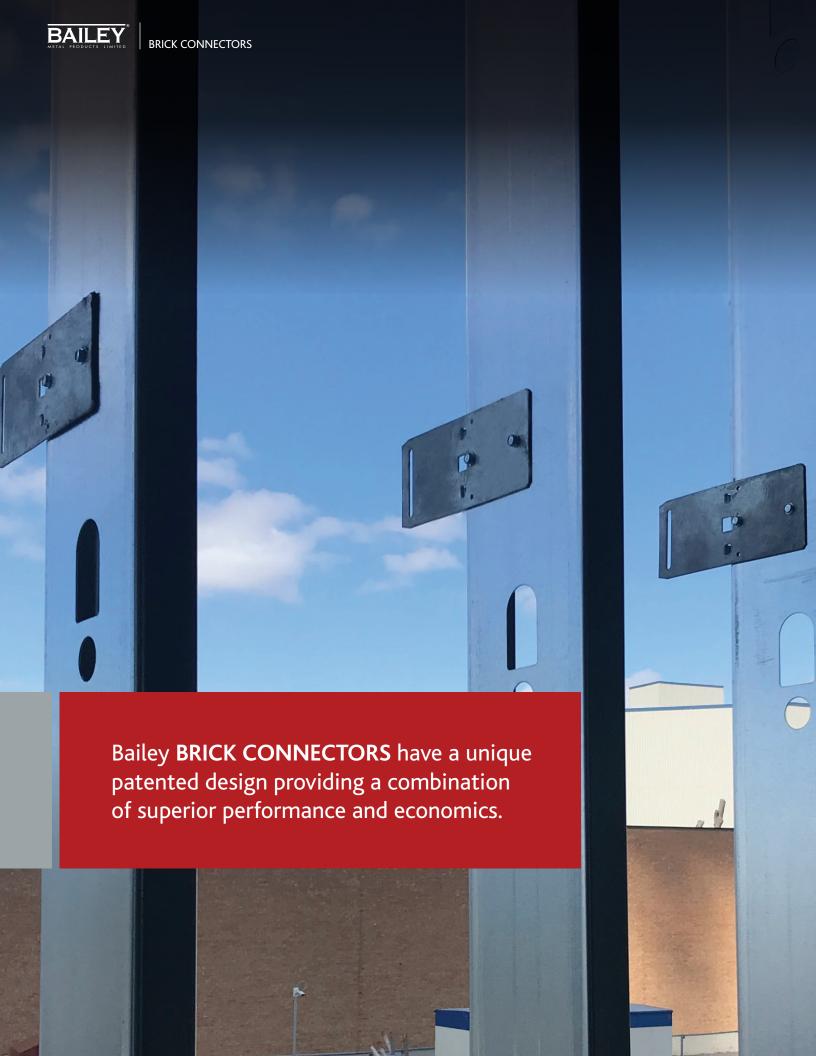


# GALVANIZED & STAINLESS STEEL PATENTED BRICK CONNECTORS



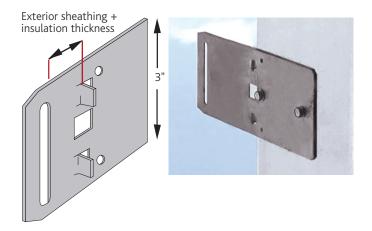




# **BRICK TIES AT A GLANCE**

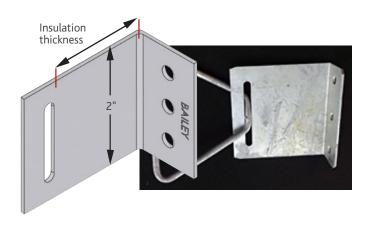
#### **SIDE MOUNT**

PRODUCT INFORMATION					
lairia NDG HDG		Galvanized (G60)			
Material Options	ESS	Stainless Steel			
:	Sizing	Insulation Thickness + Sheathing			
		0.5" to 0.65"			
		1.0"			
		1.5"			
		2.0"			
		2.5"			
3	" wide	3.0"			
	3.5"				
	4.0"				
		4.5"			
		5.0"			
		5.5"			
Packaging: 125 pcs per box					



#### **ECONO SURFACE MOUNT**

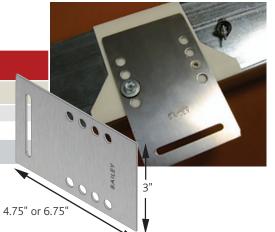
	PRODUCT INFORMATION					
Material Options	ESMG	Galvanized (G60)				
Mate	ESMS	Stainless Steel				
	Sizing	Insulation Thickness				
	0" insulation					
		0.5" insulation				
		1.0" insulation				
	1.5" insulation					
2	?" wide	2.0" insulation				
	2.5" insulation					
	3.0" insulation					
		3.5" insulation				
		4.0" insulation				
	Packaging: 125 pcs per box					



## **ADJUSTABLE SIDE MOUNT**

FINISH	STAINLESS STEEL			
Sizing	Length	Insulation Thickness + Sheathing		
2":4.	4.75"	0.5" to 2"		
3" wide	6.75"	2.5" to 4"		
Packaging: 125 pcs per box				

<sup>\*</sup>Hot-dipped galvanized V-Wires sold separately



ECONOMICAL STAINLESS STEEL (ESS) & HOT DIP GALVANIZED (HDG)

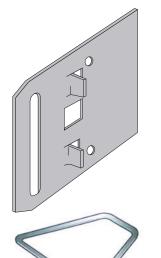


#### DESIGNED TO EXCEED ALL BUILDING CODE REQUIREMENTS

#### **PERFORMANCE**

- Engineered to exceed CSA A370 and CSA S304.1.
- HDG CONNECTORS use grade 50 Class 1 Steel with 50 KSI minimum yield strength.
- ESS CONNECTORS exceed 50 KSI minimum yield strength.
- In tests Bailey **BRICK CONNECTORS** limit any critical "free play" to significantly below the CSA standard of up to 1.2 mm.





#### **DESIGN**

- The Bailey **BRICK CONNECTORS** adjustable design provides flexibility of up to 2" differential between the stud wall and the brick veneer.
- The patented positioning tab design ensures simple, fast, and accurate installation.
- Bailey **BRICK CONNECTORS** greatly improve connection strength with a direct web connection placing the fasteners in shear.
- NOTE: A #10 screw into .033 steel has 140% greater pullout values in shear.

#### **GREAT DESIGN YIELDS GREAT RESULTS**

#### **DURABILITY**

- Galvanized HDG CONNECTORS typically exceed CSA A370-14 galvanized coating standards by 100%.
- Stainless **ESS CONNECTORS** at minimum grade 304 stainless provide ultimate durability in marine and other aggressive environments.





#### **ECONOMICS**

- Bailey **SIDE MOUNT BRICK CONNECTORS** have a unique patented design providing a combination of superior performance and economics.
- HDG and ESS connectors are designed to work with Bailey systems from 3 5/8" through 8", 1 5/8" flange and all exterior sheathing and insulation systems.

#### MINIMIZING MATERIAL USAGE MINIMIZES COSTS

Please contact **Bailey Metal Products Limited** for additional information on these **BRICK CONNECTORS**, our other building products and design recommendations. Visit our web site at **www.bmp-group.com** for details on all **Bailey Metal Products Limited** products and systems.

PATENTS CANADA 2,228,407 UNITED STATES No. 6,209,281 B1

## **BAILEY®** BRICK CONNECTORS

...meet or exceed the design and architectural requirements of the following CSA Standards:

- S304.1-14 Design of Masonry Structures (Limit States Design)
- A370-14 Connectors for Masonry

# Bailey offers two BRICK CONNECTOR systems consisting of steel tie plates, V wires, and fasteners:

- HDG Hot-Dip-Galvanized after fabrication system.
- ESS Economical Stainless Steel system.

Both systems include "bayonet" style tie plates that attach directly to the web of the steel studs. This ensures that fasteners are located in the warm, dry cavity and loaded in shear.

Tie plates are available in a variety of lengths to accommodate varying exterior sheathing/insulation thicknesses.

To simplify site coordination and ensure that **BRICK CONNECTORS** are included in the LSF Engineers design and shop drawings, **BRICK CONNECTORS** should be specified to be supplied and installed by the steel stud sub-contractor.

#### SELECTION CHART

3" SIDE MOUNT BRICK TIES						
THICKNESS OF SHEATHING + INSULATION	ECONOMICAL STAINLESS STEEL	HOT-DIP GALVANIZED STEEL	STANDARD PACKAGE			
1/2" OR 5/8"	ESS-3-05	HDG-3-05	125 pcs/ctn			
1"	ESS-3-10	HDG-3-10	125 pcs/ctn			
1 ½"	ESS-3-15	HDG-3-15	125 pcs/ctn			
2"	ESS-3-20	HDG-3-20	125 pcs/ctn			
2 ½"	ESS-3-25	HDG-3-25	125 pcs/ctn			
3"	ESS-3-30	HDG-3-30	125 pcs/ctn			
3 ½"	ESS-3-35	HDG-3-35	125 pcs/ctn			
4"	ESS-3-40	HDG-3-40	125 pcs/ctn			
4 1/2"	4 ½" ESS-3-45		125 pcs/ctn			
5"	ESS-3-50	HDG-3-50	125 pcs/ctn			
5 ½"	ESS-3-55	HDG-3-55	125 pcs/ctn			

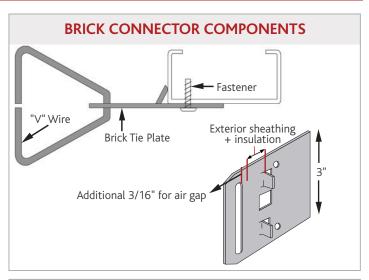


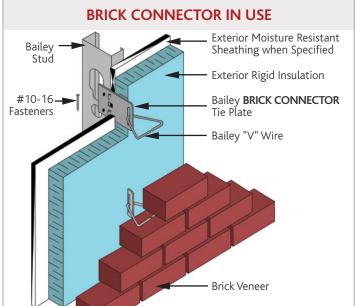
"V" WIRE					
AIR SPACE	ECONOMICAL STAINLESS STEEL	HOT-DIP GALVANIZED STEEL	STANDARD PACKAGE		
1"	ESSW-1	HDGW-1	250 pcs/ctn		

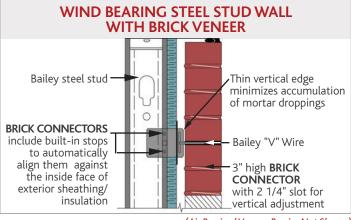
HDG V-WIRES ARE HOT-DIP-GALVANIZED AFTER FABRICATION

STEEL FASTENER						
SELF DRILLING HEX-HEAD	ECONOMICAL STAINLESS STEEL	GALVANIZED STEEL	STANDARD PACKAGE			
#10-16 X ¾"	SCREWHXS10X075P	SCREWHX10X075P	2000 pcs/ctn			









NOTE: All details are illustrations for ESS (HDG are similar)

# ADJUSTABLE SIDE MOUNT BRICK CONNECTOR



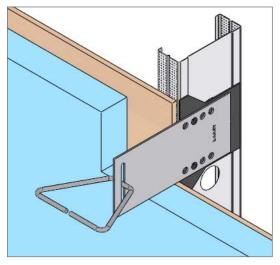


# Bailey Metal Products Ltd. has developed a versatile SIDE MOUNT BRICK CONNECTOR system.

The side mount system consists of a stainless steel tie plate, plastic thermal break/ positioning tab, and a stainless steel v-wire.

This system provides strength, corrosion resistance, adjustability, and positive placement while solving issues of dissimilar metals and thermal transfer. One size really does fit all as the Bailey stainless steel tie plate accommodates a range of sheathing thicknesses.

Performance tested, the Bailey **SIDE MOUNT BRICK CONNECTOR** meets or exceeds all relevant building codes and standards.



#### **DESIGNED TO MEET/EXCEED INDUSTRY STANDARDS**

#### **PERFORMANCE:**

- In tests, the Bailey **SIDE MOUNT BRICK CONNECTOR** limits any free play to significantly below the CSA standard of up to 1.2mm.
- · The plastic positioning tab protects against thermal transfer and dissimilar metals.
- · The positioning tabs also control the depth position in the cavity space and prevents any interference with the brick application.
- · Plastic positioning tab ensures proper installation providing consistent horizontal alignment (misalignment will reduce performance significantly).
- Bailey's Adjustable SIDE MOUNT BRICK **CONNECTORS** are manufactured from 50 ksi minimum yield strength stainless steel.
- For severe environments, as identified by the masonry requirements of CSA A370, Bailey stainless steel Connectors provide the ultimate durability.
- Engineered to CSA A370 and ASTM A666, ASTM A580 standards.



#### **DESIGNS:**

- It also provides separation between the tie plate and the screws which solves the issue of galvanic corrosion.
- Adjustable brick tie accommodates a wide range of sheathing thicknesses.
- The SIDE MOUNT BRICK CONNECTOR is manufactured from 16 gauge stainless steel (1.367 mm, 0.054") minimum base steel thickness.
- Plastic Thermal Break (Product code SMTBP).
  - The thermal break is manufactured from polyethylene.
     The plastic separator fits over the SIDE MOUNT BRICK CONNECTOR and provides a thermal separator, solves the issue of "dissimilar metals", and facilitates perfect horizontal alignment.

#### **ECONOMICS:**

- The new Bailey SIDE MOUNT BRICK CONNECTOR design provides a combination of superior performance and economics.
- The new side mounted design, stocked in both sizes, will accommodate 90% of projects.
- Packaged together with the plastic separator (125 per box).
- The Adjustable SIDE MOUNT BRICK CONNECTORS are compatible with all Bailey steel framing systems.

Please note #12 x 3/4 Hex Washer Head Screws with Bonded EPDM Washers are available from Bailey packaged 250 per box.

#### SELECTION CHART

3" ADJUSTABLE SIDE MOUNT BRICK TIES				
THICKNESS OF INSULATION	ECONOMICAL STAINLESS STEEL	STANDARD PACKAGE		
0.5" to 2"	SMABT05-20	125 pcs/ctn		
2.5" to 4"	SMABT25-40	125 pcs/ctn		



BOTH SIZES INCLUDE THERMAL BREAK PLASTIC
INSULATION RETAINER SOLD SEPARATELY – PRODUCT CODE: ESMIR (125 PCS/CTN)

	"V" WIRE				STEEL FASTENER	
SELF DRILLING HEX-HEAD	ECONOMICAL STAINLESS STEEL	HOT-DIP GALVANIZED STEEL	STANDARD PACKAGE	SELF DRILLING HEX-HEAD	ECONOMICAL STAINLESS STEEL	STANDARD PACKAGE
1"	ESSW-1	HDGW-1	250 pcs/ctn	#10-16 X ¾"	SCREWHXS10X075P	2000 pcs/ctn

HDG V-WIRES ARE HOT-DIP-GALVANIZED AFTER FABRICATION

#### PERFORMANCE DATA

ITEM		MECHANICAL FREE PLAY	SERVICEABILITY AT 0.45 KN (100 LBS)		FACTORED RESISTANCE
ADJUSTABLE SIDE MOUNT 3" Stainless			Tie mounted directly to durable surface		
4.75"	6.75"	0.406 mm max. (0.016")	Deflection	Deflection + Free Play	2.406 kN (541 lbs.)
3"	3"	,	0.634 mm (0.025")	1.040 mm max. (0.041")	•

NOTES: \* The data reported is based on connector testing in accordance with CSA A370, Connectors for Masonry.

- \* Both compression and tension capacities of the SIDE MOUNT UNIVERSAL CONNECTOR were tested with the governing values listed.
- \* The factored resistance value does not consider fastener resistance. A compatible fastener with adequate factored resistance is recommended.



## **ECONO-CONNECTOR SURFACE MOUNT BRICK TIES**

Introducing the Bailey ECONO-CONNECTOR, a versatile SURFACE MOUNTED BRICK CONNECTOR designed to connect brick veneer to the structural backup system.

The ECONO-CONNECTOR is suitable for mounting on durable surfaces and is available in galvanized and stainless steel for varying depths of exterior insulation. ECONO-CONNECTORS are universal to all Bailey steel framing systems.



#### **SELECTION CHART**

2" SURFACE MOUNT BRICK TIES						
THICKNESS OF INSULATION			STANDARD PACKAGE			
0"	ESMS-2-00	ESMG-2-00	125 pcs/ctn			
1/2"	ESMS-2-05	ESMG-2-05	125 pcs/ctn			
1"	ESMS-2-10	ESMG-2-10	125 pcs/ctn			
1 ½"	ESMS-2-15	ESMG-2-15	125 pcs/ctn			
2"	ESMS-2-20	ESMG-2-20	125 pcs/ctn			
2 1/2"	ESMS-2-25	ESMG-2-25	125 pcs/ctn			
3"	3" ESMS-2-30		125 pcs/ctn			
3 ½"	ESMS-2-35	ESMG-2-35	125 pcs/ctn			
4"	ESMS-2-40	ESMG-2-40	125 pcs/ctn			

HDG BRICK TIE PLATES ARE HOT-DIP-GALVANIZED AFTER FABRICATION INSULATION RETAINER SOLD SEPARATELY – PRODUCT CODE: ESMIR (125 PCS/CTN)

"V" WIRE						
AIR SPACE ECONOMICAL STAINLESS STEEL		HOT-DIP GALVANIZED STEEL	STANDARD PACKAGE			
1"	ESSW-1	HDGW-1	250 pcs/ctn			

HDG V-WIRES ARE HOT-DIP-GALVANIZED AFTER FABRICATION

STEEL FASTENER				
SELF DRILLING HEX-HEAD	GALVANIZED STEEL	STANDARD PACKAGE		
#10-16 X 1-1/4"	SCREWHX10X125P	1000 pcs/ctn		

# PERFORMANCE:

The **ECONO-CONNECTOR**, available in hot dip galvanized and stainless steel, is manufactured from 16ga (1.372mm) sheet metal conforming to ASTM A1008 and stainless steel conforming to ASTM A666.

The hot dipped galvanized finish conforms to CSA A370 and ASTM A153 requirement of 460g/m2/side of zinc coating. **HDG** and **ESS Connectors** are manufactured from 50ksi minimum yield strength steel. In tests Bailey **SURFACE MOUNT BRICK CONNECTORS** limit any free play significantly below the CSA standard of up to 1.2mm.

#### V-WIRE:

Bailey V-Wire is manufactured from 4.76mm diameter wire conforming to CSA Standard G30.3. The hot dip galvanized finish conforms to CSA A370 and ASTM A153 requirements of 460g/m2/side of zinc coating. The stainless steel wire conforms to ASTM A580.

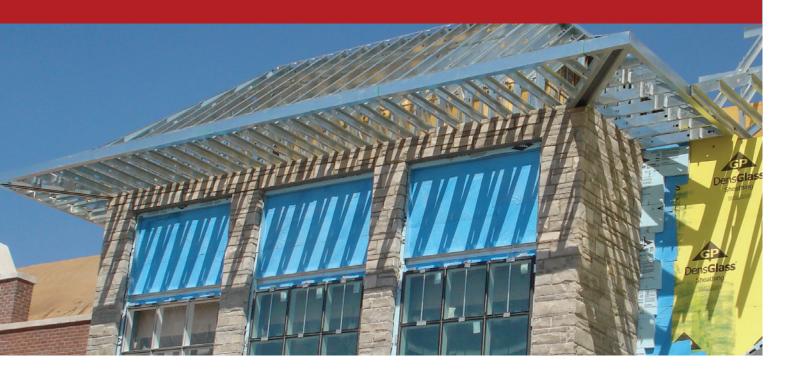
### **INSULATION RETAINER SUPPORT (ESMIR):**

The insulation support is manufactured from polyethylene. The support fits over the **ECONO-CONNECTOR** and holds the sheathing in place, preventing the insulation from separating from the back up wall.

#### **FASTENER INFORMATION:**

- Compatible fasteners for structural framing or masonry are available.
- Fasteners need to have a coating (corrosion resistance) equal to that of the connector to reduce the risk of galvanic corrosion

# **ECONO-CONNECTOR SURFACE MOUNT BRICK TIES**



#### **PERFORMANCE DATA**

ITEM	MECHANICAL FREE PLAY	SERVICEABILITY AT 0.45 KN (100 LBS)		FACTORED RESISTANCE
ECONO Stainless 2" wide (all lengths)	0.145 mm max. (0.0057")	Tie mounted directly to durable surface		
		D (I .:	D (I +: E DI	1.437 kN (323 lbs.)
		Deflection	Deflection + Free Play	
		0.478 mm (0.019")	0.623 mm max. (0.025")	

NOTES: \* The data reported is based on connector testing in accordance with CSA A370, Connectors for Masonry.

- \* Both compression and tension capacities of the **ECONO-CONNECTOR** were tested with the governing values listed.
- \* The factored resistance value does not consider fastener resistance. A compatible fastener with adequate factored resistance is recommended.
- \* The factored resistance value has been adjusted for the steel yield stress 50/58 = 0.862.

ITEM	MECHANICAL FREE PLAY	SERVICEABILITY AT 0.45 KN (100 LBS)		FACTORED RESISTANCE
ECONO Stainless 2" wide (all lengths)	0.406 mm max. (0.016")	Tie mounted directly to durable surface		
		Deflection	Deflection + Free Play	1.717 kN (386 lbs.)
		0.728 mm (0.029")	1.134 mm max. (0.045")	

#### NOTES

- \* The data reported is based on connector testing in accordance with CSA A370, Connectors for Masonry.
- \* Both compression and tension capacities of the **ECONO-CONNECTOR** were tested with the governing values listed.
- \* The factored resistance value does not consider fastener resistance. A compatible fastener with adequate factored resistance is recommended.
- \* The factored resistance value has been adjusted for the steel yield stress 50/58 = 0.862.

#### Reference Standards:

CSA A370-14 – Connectors for Masonry

ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

ASTM A580 – Standard Specification for Stainless Steel Wire

**ASTM A666** – Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar

CSA G30.3 – Cold-Drawn Steel Wire for Concrete Reinforcement

**ASTM A1008** – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable













GALVANIZED & STAINLESS STEEL PATENTED BRICK CONNECTORS

sales@bmp-group.com • www.comslab.ca



#### **MONTREAL**

525 Avenue Edward VII Dorval, QC H9P 1E7 Tel. (514) 735-3455 800-263-3455 Fax. (514) 735-5052

#### **TORONTO**

1 Caldari Road Concord, ON L4K 3Z9 Tel. (905) 738-9267 800-668-2154 Fax. (905) 738-5712

#### **CALGARY**

3924 27th Street NE Calgary, AB T1Y 5K7 Tel. (403) 248-3536 800-665-2013 Fax. (403) 248-0288

#### **EDMONTON**

101-5710 Roper Road NW Edmonton, AB T6B 3G7 Tel. (780) 462-5757 800-563-1751 Fax. (780) 450-3378

#### **VANCOUVER**

7715 Anvil Way Surrey, BC V3W 6A2 Tel. (604) 590-5100 800-818-2666 Fax. (604) 590-5105