BL-607

Brick Veneer Anchoring System for Steel Stud Construction from Blok-Lok, Ltd.

A VENEER ANCHORING SOLUTION TO MAINTAIN AIR BARRIER INTEGRITY



800-561-3026 www.blok-lok.com

BLOK-LOK

BL-607 Brick Veneer Anchor System for Steel Stud Construction

(1)

BLOK-LOK HAS DEVELOPED A VERSATILE VENEER ANCHORING SYSTEM DESIGNED TO MEET OR EXCEED RELEVANT CODES AND BUILDING STANDARDS FOR VENEER TIES IN NORTH AMERICA.

The **BL-607** is a wire tie and plate combination system which provides adjustability, minimal free-play, strength, stiffness, positive connection, corrosion resistance, and is test rated. The system provides for in-plane differential movement when installed on metal stud, with or without insulation. Using the **Flex-O-Lok Seismic Tie**, the **BL-607** meets relevant seismic tie qualifications. The anchor plate has been designed for mounting on the surface of the stud.

BASIC APPLICATIONS

For anchored veneers, the **BL-607** assembly should be applied for cavity wall construction of Level 1 institutional type and Level 2 industrial type buildings for seismic performance categories A through E. The **BL-607** system can be used with and without rigid insulation board and is recommended for optimum air barrier integrity.

- 1 BL-607 Base Plate 50 mm (2 in) x Stud width PLUS Sheathing/ Insulation PLUS Air Space, 1.5 mm (16 gauge) Carbon Steel per ASTM A 366, Hot Dipped Galvanized per ASTM A153, C1 B2; or Stainless Steel per ASTM 167
- 2 Flex-O-Lok[™] Tie and Seismic Tie 4.76 mm (3/16 in) Diameter Wire, Carbon Steel per ASTM A 82, Hot Dipped Galvanized per ASTM A153, C1 B2; Stainless Steel per ASTM A580.
- (3) Adjustability to accommodate differential wall movement 38 mm (1-1/2 in) vertical, 25 mm (1 in) horizontal.
- 4 Tie Cannot Disengage Per ASCE 5/ACI 530/TMS 402 requirements.
- (5) Free Play maintaining optimum stability of the veneer 0.3 mm (0.012 in) ~ 0.45 mm (0 .018 in), maintaining optimum stability of the veneer, maximum.
 - Capacity at Maximum Eccentricity
 - 1907 N (430 lbs.) Tension.
 2703 N (608 lbs.) Compression at 100 mm (4 in.) cavity.

- 6 Positive Connection to Back Up Material mechanically connected with fasteners – Self Drilling, Self Tapping Washer head screws (either Co-Polymer carbon steel or 300 series stainless); two screws for maximum stiffness (to meet CSA standard).
- Stiffness minimal veneer wall deflection under load
 1109 N per mm (7,687 lbs. per in) Tension at maximum eccentricity.
 2413 N per mm (11,515 lbs. per in) Compression at 4 in. cavity.
- (8) Corrosion Resistance long term durability Hot Dipped Galvanized or Austenitic (300 Series) Stainless Steel.
- (9) BL-607S Shear Anchor Provided with holes to prevent transfer of shear loads in wide cavity and high wind load conditions.
- 10 Seismic Flex-O-Lok Tie Welded tab allows for addition of a continouos wire in seismic conditions.

Test Rated – Performance verifications by Construction Testing Laboratories Limited (CTL).

Vertical Mount – Eliminates mortar build up and eases insulation installments with no insulation punctures.

1 (800) 561-3026 WWW.BLOK-LOK.COM



INSTALLATION PERFORMANCE

		FASTENER PERFORMANCE		
Gau		Gauge	Ultimate Tension	Ultimate Shear
	Dual Hardened Grade 3 Stalgard N. 12-14	18	180 kg (396 lbs.)	597 kg (1,315 lbs.)
Steel Stud		16	239 kg (527 lbs.)	750 kg (1,655 lbs.)
		14	322 kg (710 lbs.)	962 kg (2,118 lbs.)
	300 Stainless Steel	14	388 kg (855 lbs.)	631 kg (1,390 lbs.)
		16	277 kg (610 lbs.)	631 kg (1,390 lbs.)

Recommended minimum spacing of one tie per 2.67 square feet of wall area, spaced not more than 32" horizontal, and 18" vertical in the U.S.; 600 mm. horizontal (24 in.) x 812 mm. vertical (32 in.) per CSA.



PERFORMANCE CHARACTERISTICS					
Design Parameter	Mounted on Hollow Steel Section (recommended design loads and deflections as per Construction Testing Laboratories in order to simulate an incompressible backup)	CSA A370-14 Specifications	U.S. Standards*		
Free play: mm (in)	0.33 mm maximum (0.013 in)	Total Free Play \leq 1.2 mm (0.048 in)	≤ 1.6 mm (0.063 in)		
0.45 KN (101 lb) deflection: mm Free play not included *Free play included	0.63 mm (0.025 in) 0.96 mm (0.038 in)	Sum of displacement Free Play not to exceed 2.0 mm (0.08 in)	≤ 1.25 mm (0.05 in) ≤ 0.3 mm (0.118 in)		
Recommended design load: KN (lb)	0.79 (178 lb)		A) \leq 25psf (1200Pa)x(spacing area) = 68 b (31 kg) OR B) \leq 2 x 0.35 (spacing area) = 189 lb (31 kg)		
Recommended design load - tension Deflection: mm (in) Free play not included		0.84 mm (0.033 in)	A) 0.23 mm (0.009 in) <i>OR</i> B) 0.61 mm (0.025 in)		
Maximum recommended spacing	As per design professional	For non-conventional ties: 600 mm (24 in) o.c. vertically and 800 mm (32 in) o.c. horizontally except as permitted by CSA standard S304.1	\leq 800 mm (32 in) horizontally \leq 450 mm (18 in) vertically one tie per 0.25 m ² (2.7 ft ²)		
In-plane differential momentum	± 1/2"				

5.

NOTES

- The tie system recommended design load values were formulated following the procedures of CSA Standard A370-14 "Connectors for Masonry". A safety factor of 2.0 was used to determine the working load as per clause 8.4.3.1.
- The allowable pull-out or push-out design load for the FLEX-O-LOK® tie imbedded at the centerline of 90 mm. (3-5/8") brick veneer utilizing Type N mortar, exceeds or equals the recommended design loads listed in Table 1. above.
- The above design values relate to the capacity of the tie components supplied by BLOK-LOK LTD. assembled in a manner similar to the laboratory simulation used to arrive at the above recommendations.
- 4. The above design values are based on test results utilizing a 16 G. T304 ST. Slotted L-Bracket, and a T304 ST. ST. Flex-O-Lok tie measuring 4.76 mm. in diameter, 80 mm. long with 40 mm. long imbedment legs. The Bracket was mounted onto 2" x 2" 1.25" hollow steel section using 1/4" steel bolts, in order to simulate an incompressible backing.
- *Codes and Standards Compliance: Meets or exceeds relevant veneered masonry construction sections and recommendations of the following Building Code Requirements and Building Standards:
 - · CSA Standard A370-14, Connectors for Masonry
 - ACI 530-99/ASCE 5-99/TMS 402-99 Building Code Requirements for Masonry Structures
- ACI 530.1-99/ASCE 6-99/TMS 602-99 Specification for Masonry Structures
- International Building Code 2000
- Western States Clay Products BV/SS Design Guide
- Brick Industry Association Technical Notes 28b, 44b, 21a & b
- Uniform Building Code 97

Blok-Lok recommends Type 304 / Type 316 Stainless Steel for maximum protection against corrosion.

1 (800) 561-3026 WWW.BLOK-LOK.COM



ORDERING INFORMATION

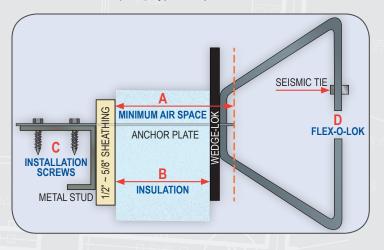
SPECIFICATIONS

BL-607 Base Plate

30mm (1-3/16 in) X 50mm (2 in), 16 gauge (1.5mm) Carbon Steel ASTM A 366; **Hot Dipped Galvanized** (H.D.G.) per ASTM A153, C1 B2; or **Stainless Steel** (S.S.) Type 304 per ASTM 167

Flex-O-Lok® Tie and Seismic Tie

4.76mm (3/16") Diametr Wire, Carbon Steel per ASTM A 82, Hot Dipped Galvanized (H.D.G.) per ASTM A153, C1 B2 or Stainless Steel (S.S.) Type 304 per ASTM A580



BASE PLATE ORDERING CHART				
Wall Cavity Cor	Product Selection			
Minimum Air Space	Insulation	Stud Back-Up		
Α	В	H.D.G.	S.S.	
3/4"	0"	60702	60705	
1-1/2"	≤ 1"	60712	60715	
2"	≤ 1-1/2"	607152	607155	
2-1/2"	≤2"	60722	60725	
3"	≤ 2-1/2"	607252	607255	
3-1/2"	≤ 3"	60732	60735	
4"	≤ 3-1/2"	607352	607355	
4-1/2"	≤4"	60742	60745	

INSTALLATION SCREW ORDERING CHART*				
Length C	Self Drilling / Self Tapping Screw	Finish	Part #	
1-1/2"	No Sealant Washer	Co-Polymer Carbon Steel	51015SC	
		300 Series Stainless Steel	53015SX	
2"	With Sealant Washer	Co-Polymer Carbon Steel	51020SCW	
		300 Series Stainless Steel	53020SXW	

	_			
`			NT	37
vv	AR	RA		Y

Seller makes no warranty of any kind, expressed or implied, except that the goods sold under this agreement shall be of the standard quality of the seller, and buyer assumes all risk and liability resulting from the use of the goods, whether used singly or in combination with other goods. Seller neither assumes nor authorizes any person to assume for seller any other liability in conjunction with the sale or use of the goods sold, and there is no oral agreement or warranty collateral to or affecting this transaction.

WARNING

The information contained in this publication does not constitute any professional opinion or judgement and should not be used as a substitute for competent professional determinations. Each construction project is unique and the appropriate use of this product is the responsibility of the engineers, architects, and other professionals who are familiar with the specific requirements of the project.



BLOK-LOK, LTD.

12 Ashbridge Circle | Woodbridge, ON L4L 3R5 PHONE: (905) 266-2277 | FAX: (905) 26-2272 EMAIL: sales@blok-lok.com | www.blok-lok.com





HOHMANN & BARNARD, INC.

30 Rasons Court | Hauppauge, NY 11788 PHONE: (631) 234-0600 | FAX: (631) 234-0683 EMAIL: weanchor@h-b.com | www.h-b.com

BLT-9S

BLT-9