BAILEY PONYWALL HEAVY PARTIAL WALL FRAMING CONNECTION TO FLOOR

The Bailey PonyWall is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track. This high-performance, reliable, and durable solution for knee wall-to-foundation connections transfers loads through the stud member onto the welded 1/2" base plate which is then anchored to the floor system.

PRODUCT DIMENSIONS

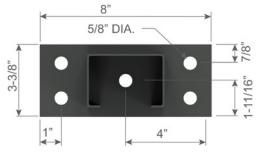
PW24 = 23-3/4" tall with 3-3/8" wide x 8" long plate PW36 = 35-3/4" tall with 3-3/8" wide x 8" long plate PW48 = 47-3/4" tall with 3-3/8" wide x 8" long plate

MATERIAL SPECIFICATIONS

Plate Material: CSA: G40.21 44W/300W 1/2" thick hot rolled steel Stud Material: Structural Grade 50 (362S250-97), 50ksi (340 MPa) 12ga (97mil), 0.1017" Design thickness, 0.0966" Min. thickness Packaging: Individually ASTM: A36, A653/A653M, A1003/A1003M

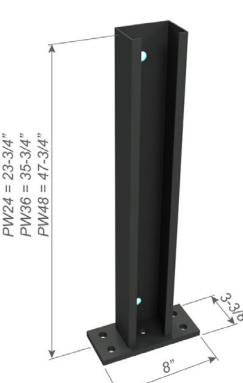
INSTALLATION

Install the PonyWall inside the track or directly to the floor structure. Anchor to the floor as designed by EOR. Attach the studs to both flanges of the PonyWall. A minimum of 3-1/2" stud member can be used.



* Bailey PonyWall are distributed by Bailey Metal Products in Canada under permission granted by Clark Dietrich Building Systems.

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MAXIMUM SPECIFIED VALUES

PonyWall HEAVY BAILEY

BAILEY PonyWall HEAVY

GENERAL:

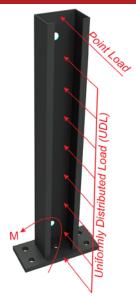
BAILEY PonyWall Heavy Member - 362S250-97 Material Thickness: 97 mil (0.1017 in.) design thickness Material Strength: Structural Grade 50, 50 ksi minimum yield stress ASTM: A653/A653M, A1003/A1003M

BAILEY PonyWall Heavy Base-Plate

Material Thickness: 1/2" minimum thickness Material Strength: Structural Grade 44, 44 ksi minimum yield stress CSA: G40.21 44W/300W

Design Standard - CSA S136-2016 (LSD)

North American specification for the design of cold-formed steel structural members.



BAILEY PonyWall Heavy Maximum Specified Moment and Loads										
	PonyWall	Anchors to	Momont	Maximum Specified Loads						
Member	Height, in. (ft)	Structure	Moment (lbs-ft)	Point Load @ Cantilever End (lbs)	Uniform Distributed Load (lbs/ft)					
PW24	24 (2)			763	763					
PW36	36 (3)	Designed by Others	1,526	509	339					
PW48	48 (4)	0 111010		382	191					

Notes:

1. BAILEY PonyWall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.

Cut-of-plane loads are transferred to the floor system through the base-plate, which is welded to the BAILEY PonyWall Heavy member.
BAILEY PonyWall Heavy may be used in place of standard framing members, or in conjunction with them to frame the wall.

4. For serviceability/deflection calculations of the BAILEY PonyWall Heavy, an effective moment of inertia = 0.774 in⁴ was used.

5. Maximum specified point load @ cantilever end and maximum specified uniformly distributed load were both calculated using the maximum specified moment.

6. Base connection between the BAILEY PonyWall Heavy and support structure is designed by others.

7. It is the responsibility of the designer to properly detail the connections on the contract drawings.

BAILEY PonyWall Heavy Maximum Specified Moment w/Anchors											
Member	Anchors to Structure	No. of Anchors to Structure	Moment (lbs-ft)								
BAILEY	1/2" φ Hilti Kwik Bolt-3	1	297								
PonyWall	(3-5/8" Nominal Embedment, 2900 psi Uncracked Concrete)	4	767								

Notes:

1. BAILEY PonyWall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.

2. Out-of-plane loads are transferred to the floor system through base-plate, which is welded to the BAILEY PonyWall Heavy member

3. BAILEY PonyWall Heavy may be used in place of standard framing members, or in conjunction with them to frame the wall

4. For serviceability/deflection calculations of the BAILEY PonyWall Heavy, an effective moment of inertia = 0.774 in⁴ was used.

5. Maximum specified moments w/anchors are based on using 1/2" φ Hilti Kwik Bolt-3 anchor resistances to concrete.

6. Other anchors may be used to achieve the full BAILEY PonyWall Heavy resistance, but must be designed separately.

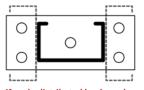
7. Listed values have not been increased for wind, seismic, or other factors.

8. Hilti is a registered trademark of Hilti Aktiengesellschaft Corporation. 9. It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.

10. It is the responsibility of the designer to properly detail connections on the contract drawings.

11. See Figure-1 for base-plate anchor details

Figure 1 - PonyWall Base-Plate Anchor Details





(1) Anchor to structure





Uniformly distributed loads are based on framing members placed on each side of the Pony Wall

CONCENTRATED LOAD AT FREE END

GENERAL:

PonyWall Heavy Member - 362S250-97

Material Thickness: 97 mil (0.1017 in.) design thickness Material Strength: Structural Grade 50, 50 ksi minimum yield stress ASTM: A653/A653M, A1003/A1003M

PonyWall Heavy Base-Plate

Material Thickness: 1/2" minimum thickness Material Strength: Structural Grade 44, 44 ksi minimum yield stress CSA: G40.21 44W/300W

Design Standard - CSA S136-2016 (LSD)

North American specification for the design of cold-formed steel structural members.



(1) Anchor to structure



(4) Anchors to structure



BAILEY PonyWall Heavy Maximum Specified Point Loads														
	PonyWall	All Point Load @ Cantilever End (lbs) Momer								nt Due to Point Load (lbs-ft)				
Member	Height, in. (ft)	L/720	L/360	L/240	L/180	P _{max}	L/720	L/360	L/240	/240 L/180 M _{max}				
PW24	24 (2)	166	332	497	663	763	332	663	995	1,326	1,526			
PW36	36 (3)	73	146	220	293	509	220	439	659	878	1,526			
PW48	48 (4)	41	82	123	164	382	164	328	492	656	1,526			

Notes:

1. BAILEY PonyWall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.

2. Out-of-plane loads are transferred to the floor system through base-plate, which is welded to the BAILEY PonyWall Heavy member.

3. BAILEY PonyWall Heavy may be used in place of standard framing members, or in conjunction with them to frame the wa

4. For serviceability/deflection calculations of the BAILEY PonyWall Heavy, an effective moment of inertia = 0.774 in⁴ was used.

5. When both point and uniform loads are applied, the combined loads shall be limited to the maximum specified moment.

6. Base connection between the BAILEY PonyWall Heavy and support structure is designed by others.

7. It is the responsibility of the designer to properly detail the connections on the contract drawings.

BAILEY PonyWall Heavy Maximum Specified Point Loads w/Anchors													
PonyWall Member Height, in. (ft)		Anchors to	No. of	Poin	t Load @) Cantile	ver End	(lbs)	Moment Due to Point Load (lbs-ft)				
	Structure	Anchors	L/720	L/360	L/240	L/180	P _{max}	L/720	L/360	L/240	L/180	M _{max}	
D) 1/2 4	D1/24 24 (2)	1/2" ф Hilti Kwik Bolt-3	1	149	149	149	149	149	297	297	297	297	297
PW24 24	24 (2)		4	166	332	383	383	383	332	663	767	767	767
D\\/26	26 (2)	(3-5/8" Nominal Embedment, 2900 psi	1	73	99	99	99	99	220	297	297	297	297
PW36 36 (3)	30 (3)		4	73	146	220	256	256	220	439	659	767	767
PW48 48 (4)	40 (4)	Uncracked Concrete)	1	41	74	74	74	74	164	297	297	297	297
	40 (4)	, , , , , , , , , , , , , , , , , , , ,	4	41	82	123	164	192	164	328	492	656	767

Notes:

1. BAILEY PonyWall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.

2. Out-of-plane loads are transferred to the floor system through base-plate, which is welded to the BAILEY PonyWall Heavy member.

3. BAILEY PonyWall Heavy may be used in place of standard framing members, or in conjunction with them to frame the wall

4. For serviceability/deflection calculations of the BAILEY PonyWall Heavy, an effective moment of inertia = 0.774 in⁴ was used. 5. Maximum specified point loads w/anchors are based on using 1/2" φ Hilti Kwik Bolt-3 anchor resistances to concrete.

6. Other anchors may be used to achieve the full BAILEY PonyWall Heavy resistance, but must be designed separately. 7. Listed values have not been increased for wind, seismic, or other factors.

8. Hilti is a registered trademark of Hilti Aktiengesellschaft Corporation.

9. It is the designer's responsibility to check for minimum concrete edge distance and minimum concrete thickness when using anchors.

10. It is the responsibility of the designer to properly detail connections on the contract drawings.

11. See Figure-1 for base-plate anchor details.

UNIFORMLY DISTRIBUTED LOAD (UDL)

GENERAL:

PonyWall Heavy Member - 362S250-97

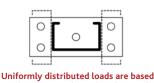
Material Thickness: 97 mil (0.1017 in.) design thickness Material Strength: Structural Grade 50, 50 ksi minimum yield stress ASTM: A653/A653M, A1003/A1003M

PonyWall Heavy Base-Plate

Material Thickness: 1/2" minimum thickness Material Strength: Structural Grade 44, 44 ksi minimum yield stress CSA: G40.21 44W/300W

Design Standard - CSA S136-2016 (LSD)

North American specification for the design of cold-formed steel structural members.



on framing members placed on each side of the Pony Wall



(1) Anchor to structure

С

(4) Anchors to structure



BAILEY PonyWall Heavy Maximum Specified UDL Loads													
PonyWall	Uni	Uniformly Distributed Load (lbs-ft) Moment Due to UDL Load (lbs-ft											
Height, in. (ft)	L/720	L/360	L/240	L/180	W _{max}	L/720	L/360	L/240	L/180 M _{max}	M _{max}			
24 (2)	223	447	670	763	763	447	894	1,526	1,526	1,526			
36 (3)	66	131	197	262	339	295	590	884	1,179	1,526			
48 (4)	27	55	82	110	191	220	440	660	880	1,526			
	24 (2) 36 (3)	PonyWall Uni Height, in. (ft) L/720 24 (2) 223 36 (3) 66	PonyWall Uniformly Dif Height, in. (ft) L/720 L/360 24 (2) 223 447 36 (3) 66 131	PonyWall Height, in. (ft) Uniformly Distributed 24 (2) 223 447 670 36 (3) 66 131 197	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs 24 (2) 223 447 670 763 36 (3) 66 131 197 262	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs-ft) L/720 L/360 L/240 L/180 W _{max} 24 (2) 223 447 670 763 763 36 (3) 66 131 197 262 339	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs-ft) Model 24 (2) 223 447 670 763 763 447 36 (3) 66 131 197 262 339 295	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs-ft) Moment During 24 (2) 223 447 670 763 763 447 894 36 (3) 66 131 197 262 339 295 590	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs-ft) Moment Due to UDL1 24 (2) 223 447 670 763 763 447 894 1,526 36 (3) 66 131 197 262 339 295 590 884	PonyWall Height, in. (ft) Uniformly Distributed Load (lbs-ft) Moment Due to UDL Load (lbs-ft) 24 (2) 223 447 670 763 763 447 894 1,526 1,526 36 (3) 66 131 197 262 339 295 590 884 1,179			

Notes:

1. BAILEY PonyWall Heavy is intended to support out-of-plane loading of cantilevered partial wall systems that are unsupported at the top track.

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3. BAILEY PonyWall Heavy may be used in place of standard framing members, or in conjunction with them to frame the wall. 4. For serviceability/deflection calculations of the BAILEY PonyWall Heavy, an effective moment of inertia = 0.774 in4 was used.

5. When both point and uniform loads are applied, the combined loads shall be limited to the maximum specified moment.

6. Base connection between the BAILEY PonyWall Heavy and support structure is designed by others.

7. It is the responsibility of the designer to properly detail the connections on the contract drawings.

BAILEY PonyWall Heavy Maximum Specified UDL Loads w/Anchors														
PonyWall Member Height, in. (ft)	2	Anchors to	No. of	Unifo	rmly Dis	stribute	d Load (l	bs-ft)	Moment Due to UDL Load (lbs-ft)					
	Structure	Anchors	L/720	L/360	L/240	L/180	W _{max}	L/720	L/360	L/240	L/180	M _{max}		
D))/24	PW24 24 (2)	1/2" ф Hilti Kwik Bolt-3	1	149	149	149	149	149	297	297	297	297	297	
PW24			4	223	383	383	383	383	447	767	767	767	767	
PW36	26 (2)	(3-5/8" Nominal	1	65	66	66	66	66	295	297	297	297	297	
PW36 36 (3)	50 (5)		4	65	131	170	170	170	295	589	767	767	767	
PW48 48 (4)	49 (4)	Uncracked Concrete)	1	27	37	37	37	37	220	297	297	297	297	
	48 (4)	,	4	27	55	82	96	96	220	440	660	767	767	

CALGARY

800-665-2013

Notes:

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- 5. Maximum specified UDL loads w/anchors are based on using 1/2" φ Hilti Kwik Bolt-3 anchor resistances to concrete.
- 6. Other anchors may be used to achieve the full BAILEY Pony Wall Heavy resistance, but must be designed separately. 7. Listed values have not been increased for wind, seismic, or other factors.

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11. See Figure-1 for base-plate anchor details.

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