

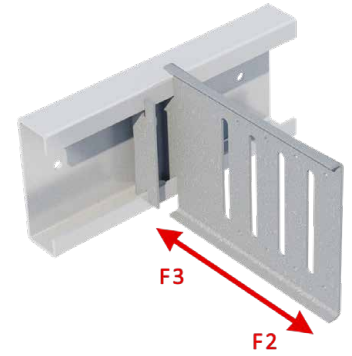
DRIFT RAIL AND CLIP (DRC) - DESIGN GUIDE

ATTACHMENT TO STRUCT. STEEL: **HILTI X-U FASTENERS**  
ATTACHMENT TO STUD: **AS A DEFLECTION CONNECTION**

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
USING CLIP AS A DEFLECTION CONNECTION

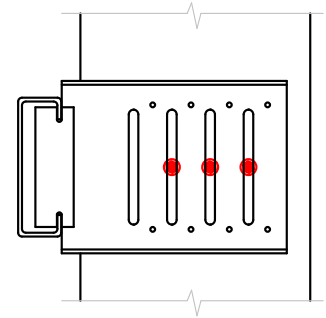
Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	560	600
	18ga (43mil)			(2) x #14	655	670
	16ga (54mil)			(2) x #14	1000	970
	14ga (68mil)			(2) x #14	1070	1325
	12ga (97mil)			(2) x #14	1070	2040
DRC6-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	600
	18ga (43mil)			(3) x #14	655	670
	16ga (54mil)			(3) x #14	1000	970
	14ga (68mil)			(3) x #14	1070	1325
	12ga (97mil)			(3) x #14	1070	2040
DRC8-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	560	620
	18ga (43mil)			(3) x #14	655	730
	16ga (54mil)			(3) x #14	1000	1060
	14ga (68mil)			(3) x #14	1070	1340
	12ga (97mil)			(3) x #14	1070	1965



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
USING CLIP AS A DEFLECTION CONNECTION

Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)	
			Screw Pattern	No. of Screws	F2 (Tension)	F3 (Compression)
DRC3-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(2) x #14	490	440
	18ga (43mil)			(2) x #14	540	520
	16ga (54mil)			(2) x #14	850	870
	14ga (68mil)			(2) x #14	850	1170
	12ga (97mil)			(2) x #14	850	1600
DRC6-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	440
	18ga (43mil)			(3) x #14	540	520
	16ga (54mil)			(3) x #14	850	870
	14ga (68mil)			(3) x #14	850	1170
	12ga (97mil)			(3) x #14	850	1600
DRC8-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(3) x #14	490	485
	18ga (43mil)			(3) x #14	540	620
	16ga (54mil)			(3) x #14	850	900
	14ga (68mil)			(3) x #14	850	1105
	12ga (97mil)			(3) x #14	850	1710



(3) #14 Deflection Screw Pattern  
Shown in a DRC6 Clip

Notes:

- 1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.
- 2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.
- 3 Allowable loads have not been increased for wind, seismic, or other factors.
- 4 Minimum (2) x #14 shouldered screws (for DRC3) and (3) x #14 shouldered screws (for DRC6 and DRC8) must be used to secure the Drift Rail Clip for attachment to stud (#14 shouldered screws provided with each Drift Rail Clip).
- 5 It is the responsibility of the designer to properly detail connections on the contract drawings.

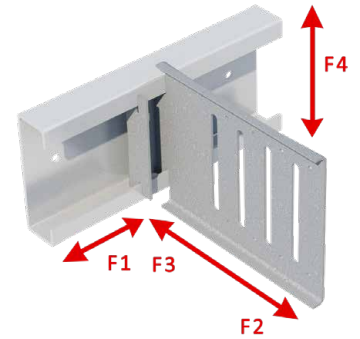
DRIFT RAIL AND CLIP (DRC) - DESIGN GUIDE

ATTACHMENT TO STRUCT. STEEL: **HILTI X-U FASTENERS**  
 ATTACHMENT TO STUD: **FIXED CONNECTION W/(4)#10-16**

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
 USING CLIP AS A FIXED CONNECTION

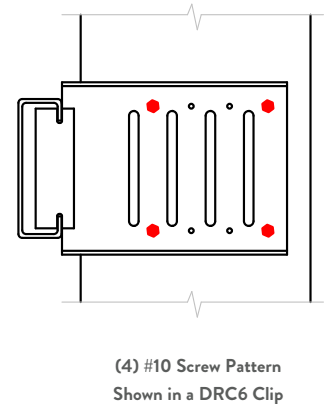
Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	280
	18ga (43mil)	(4) x #10		155	655	670	415	
	16ga (54mil)	(4) x #10		155	1000	970	840	
	14ga (68mil)	(4) x #10		155	1070	1325	865	
	12ga (97mil)	(4) x #10		155	1070	2040	865	
DRC6-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	155	560	600	235
	18ga (43mil)	(4) x #10		155	655	670	345	
	16ga (54mil)	(4) x #10		155	1000	970	705	
	14ga (68mil)	(4) x #10		155	1070	1325	725	
	12ga (97mil)	(4) x #10		155	1070	2040	725	
DRC8-97	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	140	560	620	240
	18ga (43mil)	(4) x #10		140	655	730	360	
	16ga (54mil)	(4) x #10		140	1000	1060	725	
	14ga (68mil)	(4) x #10		140	1070	1340	745	
	12ga (97mil)	(4) x #10		140	1070	1965	745	



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
 USING CLIP AS A FIXED CONNECTION

Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC3-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	280
	18ga (43mil)	(4) x #10		115	540	520	415	
	16ga (54mil)	(4) x #10		115	850	870	740	
	14ga (68mil)	(4) x #10		115	850	1170	740	
	12ga (97mil)	(4) x #10		115	850	1600	805	
DRC6-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	115	490	440	235
	18ga (43mil)	(4) x #10		115	540	520	345	
	16ga (54mil)	(4) x #10		115	850	870	705	
	14ga (68mil)	(4) x #10		115	850	1170	725	
	12ga (97mil)	(4) x #10		115	850	1600	725	
DRC8-68	20ga (33mil)	(2) x Hilti X-U Universal Knurled Shank Fasteners to 3/16" ASTM A36 Steel	See Figure	(4) x #10	120	490	485	240
	18ga (43mil)	(4) x #10		120	540	620	360	
	16ga (54mil)	(4) x #10		120	850	900	725	
	14ga (68mil)	(4) x #10		120	850	1105	745	
	12ga (97mil)	(4) x #10		120	850	1710	745	



Notes:

- 1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.
- 2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.
- 3 Allowable loads have not been increased for wind, seismic, or other factors.
- 4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.
- 5 Use linear load interaction for combined loading conditions.
- 6 Minimum (4) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.
- 7 It is the responsibility of the designer to properly detail connections on the contract drawings.
- 8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.

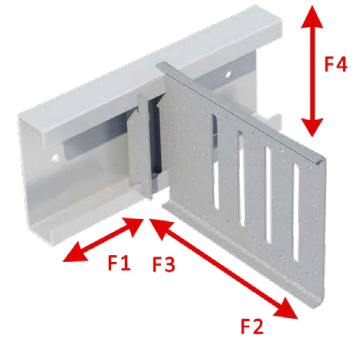
DRIFT RAIL AND CLIP (DRC) - DESIGN GUIDE

ATTACHMENT TO STRUCT. STEEL: **HILTI X-U FASTENERS**  
 ATTACHMENT TO STUD: **FIXED CONNECTION W/(8)#10-16**

Drift Rail and Clip - 12ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
 USING CLIP AS A FIXED CONNECTION

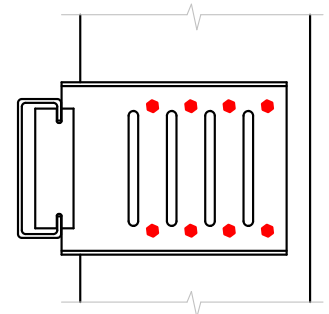
Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-97	20ga (33mil)	(2) x Hilti X-U	See Figure	(8) x #10	155	560	600	395
	18ga (43mil)	Universal Knurled		(8) x #10	155	655	670	585
	16ga (54mil)	Shank Fasteners		(8) x #10	155	1000	970	875
	14ga (68mil)	to 3/16" ASTM		(8) x #10	155	1070	1325	920
	12ga (97mil)	A36 Steel		(8) x #10	155	1070	2040	920
DRC8-97	20ga (33mil)	(2) x Hilti X-U	See Figure	(8) x #10	140	560	620	375
	18ga (43mil)	Universal Knurled		(8) x #10	140	655	730	555
	16ga (54mil)	Shank Fasteners		(8) x #10	140	1000	1060	910
	14ga (68mil)	to 3/16" ASTM		(8) x #10	140	1070	1340	910
	12ga (97mil)	A36 Steel		(8) x #10	140	1070	1965	910



Drift Rail and Clip - 14ga Clip / 12ga Rail

ALLOWABLE DRIFT RAIL CLIP LOADS  
 USING CLIP AS A FIXED CONNECTION

Clip designation	Stud gauge (mils)	Anchor to structure	Framing Connection		ASD Allowable Loads (lbs)			
			Screw Pattern	No. of Screws	F1 (In-Plane)	F2 (Tension)	F3 (Compression)	F4 (Shear)
DRC6-68	20ga (33mil)	(2) x Hilti X-U	See Figure	(8) x #10	115	490	440	395
	18ga (43mil)	Universal Knurled		(8) x #10	115	540	520	585
	16ga (54mil)	Shank Fasteners		(8) x #10	115	850	870	740
	14ga (68mil)	to 3/16" ASTM		(8) x #10	115	850	1170	740
	12ga (97mil)	A36 Steel		(8) x #10	115	850	1600	805
DRC8-68	20ga (33mil)	(2) x Hilti X-U	See Figure	(8) x #10	120	490	485	375
	18ga (43mil)	Universal Knurled		(8) x #10	120	540	620	555
	16ga (54mil)	Shank Fasteners		(8) x #10	120	850	900	800
	14ga (68mil)	to 3/16" ASTM		(8) x #10	120	850	1105	800
	12ga (97mil)	A36 Steel		(8) x #10	120	850	1710	865



(8) #10 Screw Pattern  
 Shown in a DRC6 Clip

Notes:

- 1 Allowable loads (ASD) listed are for Drift Rail Clip where Drift Rail is attached to 3/16" thick ASTM A36 steel using (2) x Hilti X-U Universal Knurled Shank fasteners spaced 2" apart at 6" on center spacing.
- 2 (2) x Hilti X-U Universal Knurled Shank fasteners must be fastened at every 6" o.c. for Drift Rail attachment to 3/16" ASTM A36 steel structure. Other fasteners may be used to achieve full clip capacity but must be designed separately.
- 3 Allowable loads have not been increased for wind, seismic, or other factors.
- 4 Where fasteners are loaded simultaneously, load interaction must be considered following fastener manufacturer guidelines.
- 5 Use linear load interaction for combined loading conditions.
- 6 Minimum (8) x #10-16 screws must be used to secure the Drift Rail Clip for attachment to stud.
- 7 It is the responsibility of the designer to properly detail connections on the contract drawings.
- 8 F1 (In-Plane) loads are based on using a Drift Locking Clip (DRLC) or Drift Locking Angle (DRLA) restricting Drift Clip lateral movement.