Code Compliance Research Report
CCRR-0208

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Renewal Date: 08-29-2018
Revision Date: 09-13-2017

DIVISION: 05 00 00 – METALS
Section: 05 40 00 – Cold-Formed Metal Framing

REPORT HOLDER:
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REPORT SUBJECT:
ClarkDietrich™ *FastClip™* Extended Slide Clip (FCEC)
ClarkDietrich™ *FastClip™* Slide Clip (FCSC)

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2015 and 2012 *International Building Code®* (IBC)
- 2015 and 2012 *International Residential Code®* (IRC)
- 2017 *Florida Building Code - Building* (FBC-B) including High Velocity Hurricane Zone. (see Section 9)
- 2017 *Florida Building Code - Residential* (FBC-R) including High Velocity Hurricane Zone. (see Section 9)
- 2016 *California Building Code* (CBC) (see Section 9)
- 2016 *California Residential Code* (CRC) (see Section 9)

1.2 The FastClip™ Extended Clips (FCEC) and FastClip™ Slide Clips (FCSC) have been evaluated for the following properties:

- Structural Performance

1.3 *FastClip™* Extended Clips (FCEC) and *FastClip™* Slide Clips (FCSC) have been evaluated for use as cold-formed steel connectors that attach exterior curtain wall studs to the supporting structure while allowing vertical movement independent of the cold-formed steel framing.

2.0 STATEMENT OF COMPLIANCE

FastClip™ Extended Clips (FCEC) and *FastClip™* Slide Clips (FCSC) comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.0.

3.0 DESCRIPTION

3.1. FCECs are fabricated from ASTM A1003 Type H, Grade 50 steel with a G90 galvanized coating per ASTM C955. FCECs are available in four lengths (6”, 8”, 10” and 12”). See Figure 1.

3.2. FCSCs are fabricated from ASTM A1003 Type H, Grade 50 steel with a G90 galvanized coating. FCSCs are available in two lengths (3-1/2” and 5-1/2”). See Figure 2.

4.0 PERFORMANCE CHARACTERISTICS

4.1. *FastClip™* connectors allowable design capacities are listed in Table 2 for attachment to cold-formed steel studs.

4.2. Design wind loads must be based on Section 1609 of the IBC, FBC or CBC, as applicable.

4.3. Load combinations must be in accordance with Section 1605.2 or 1605.3 of the IBC, FBC and CBC, as applicable.

4.3.1. When using the alternative basic load combinations that include wind or seismic loads in Section 1605.3.2 of the IBC, FBC and CBC, the ASD loads recognized in Table 2 are not permitted to be increased or load combinations reduced.

5.0 INSTALLATION

FastClip™ connectors must be installed in accordance with the manufacturer’s published installation instructions, the applicable Code and this Research Report. The manufacturer’s published installation instructions and this Research Report must be strictly adhered to, and a copy of

the instructions must be available on the jobsite during installation.

5.1. *FastClip™* connectors are attached to cold-formed steel studs as specified in Table 1.

5.1.1. *FastClip™* connector attachment to the supporting structure is outside the scope of this report and must be designed by a registered design professional.

6.0 CONDITION OF USE

The *FastClip™* connectors described in this Research Report comply with, or are suitable alternatives to, what is specified in those Codes and Uses listed in Section 1.0 of this report, subject to the following conditions:

6.1. Where required by the building official, engineering calculations and details shall be provided by a registered design professional.

6.2. The *FastClip™* Extended Slide Clips and *FastClip™* Slide Clips are manufactured in Warren, Ohio and Cleveland, Ohio in accordance with an approved quality control system that includes independent third party inspections by Intertek.

7.0 SUPPORTING EVIDENCE

7.1. Drawings and installation instructions submitted by ClarkDietrich Building Systems, LLC.

7.2. Reports of testing demonstrating compliance with the performance requirements of ICC-ES AC261, Acceptance Criteria for Connectors Used With Cold-Formed Steel Structural Members, revised May 2015.

7.3. Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

The ClarkDietrich *FastClip™* Extended Clips and *FastClip™* Slide Clips that are described in this report shall be identified with labeling on the packaging, which includes the manufacturer's name or initials or logo, product name, yield strength, minimum thickness, protective coating, number of parts in package, and the Code Compliance Research Report designation and number ("ATI CCRR-0208" or "Intertek CCRR-0208").

8.1. ClarkDietrich *FastClip™ FCSC* products are embossed with the manufacturer's name, logo or initials, the product designator FCSC, and the patent number 6688069.

8.2. ClarkDietrich Extended *FastClip™ FCEC* products are embossed with the manufacturer's name, logo or initials, and the product designator FCEC.

9.0 OTHER CODES

9.1. FLORIDA BUILDING CODE

9.1.1. Scope of Evaluation: The *FastClip™* connectors were evaluated for compliance with the 2017 *Florida Building Code – Building and Florida Building Code – Residential.*

9.1.2. Conclusion: The *FastClip™* connectors, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2017 *Florida Building Code – Building* and *Florida Building Code – Residential*, including the High-Velocity Hurricane Zone provisions.

9.2. CALIFORNIA BUILDING CODE

9.2.1. Scope of Evaluation: The *FastClip™* connectors were evaluated for compliance with the 2016 *California Building Code* and *California Residential Code.*

9.2.2. Conclusion: The *FastClip™* connectors, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2016 *California Building Code* and *California Residential Code*.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1. Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2. Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3. Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

Table 1 – Fastening Schedule

ClarkDietrich *FastClip™*	Connection to Exterior Curtain Wall Cold-Formed Steel Studs [1]		Connection to Supporting Structure
	Qty.	Fastener Description	
FCSC 3-1/2”	2	*FastClip™* Deflection Screw [2] (#14 x ¾” carbon steel, hex flange, self-drilling screw)	*FastClip™* Slide Clip and *FastClip™* Extended Clip attachment to the supporting structure is outside the scope of this report and must be designed by a registered design professional.
FCSC 5-1/2” FCEC 6” FCEC 8” FCEC 10” FCEC 12”	3	*FastClip™* Deflection Screw [2] (#14 x ¾” carbon steel, hex flange, self-drilling screw)	

[1] For the attachment to cold-formed steel studs, fasteners are installed through the slots in the long leg of the *FastClip™.*

[2] *FastClip™* Deflection Screws are installed through the slots of the long leg of the *FastClip™.*

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Table 2 – *FastClip™* Allowable Design Capacities

ClarkDietrich *FastClip™*	Cold-Formed Steel Stud [1]		Allowable Design Loads		
	Thickness (mils)	Yield Strength (ksi)	ASD (lbf)	LRFD (lbf)	1/8" Deflection Service Limit Load (lbf)
FCEC 6"	33	33	565	904	881
	43	33	776	1,241	968
	54	50	1,103	1,765	1,189
	68	50	1,030	1,649	1,158
	97	50	1,062	1,699	1,094
FCEC 8"	33	33	640	1,024	1,075
	43	33	852	1,364	1,179
	54	50	1,086	1,738	1,123
	68	50	1,005	1,609	1,196
	97	50	1,118	1,790	1,128
FCEC 10"	33	33	506	986	808
	43	33	819	1,328	1,093
	54	50	1,103	1,765	1,179
	68	50	1,053	1,686	1,078
	97	50	1,100	1,931	1,100
FCEC 12"	33	33	503	976	821
	43	33	791	1,267	943
	54	50	1,126	1,802	1,062
	68	50	1,061	1,715	1,061
	97	50	1,136	1,818	1,185
FCSC 3-1/2"	33	33	425	680	848
	43	33	544	871	1,079
	54	50	660	1,056	1,247
	68	50	696	1,114	1,195
	97	50	857	1,372	1,050
FCSC 5-1/2"	33	33	596	977	813
	43	33	784	1,255	920
	54	50	1,065	1,750	1,213
	68	50	1,065	1,705	1,310
	97	50	1,103	1,765	1,461

[1] Steel studs shall be fabricated from cold-formed steel complying with ASTM A1003/A1003M.

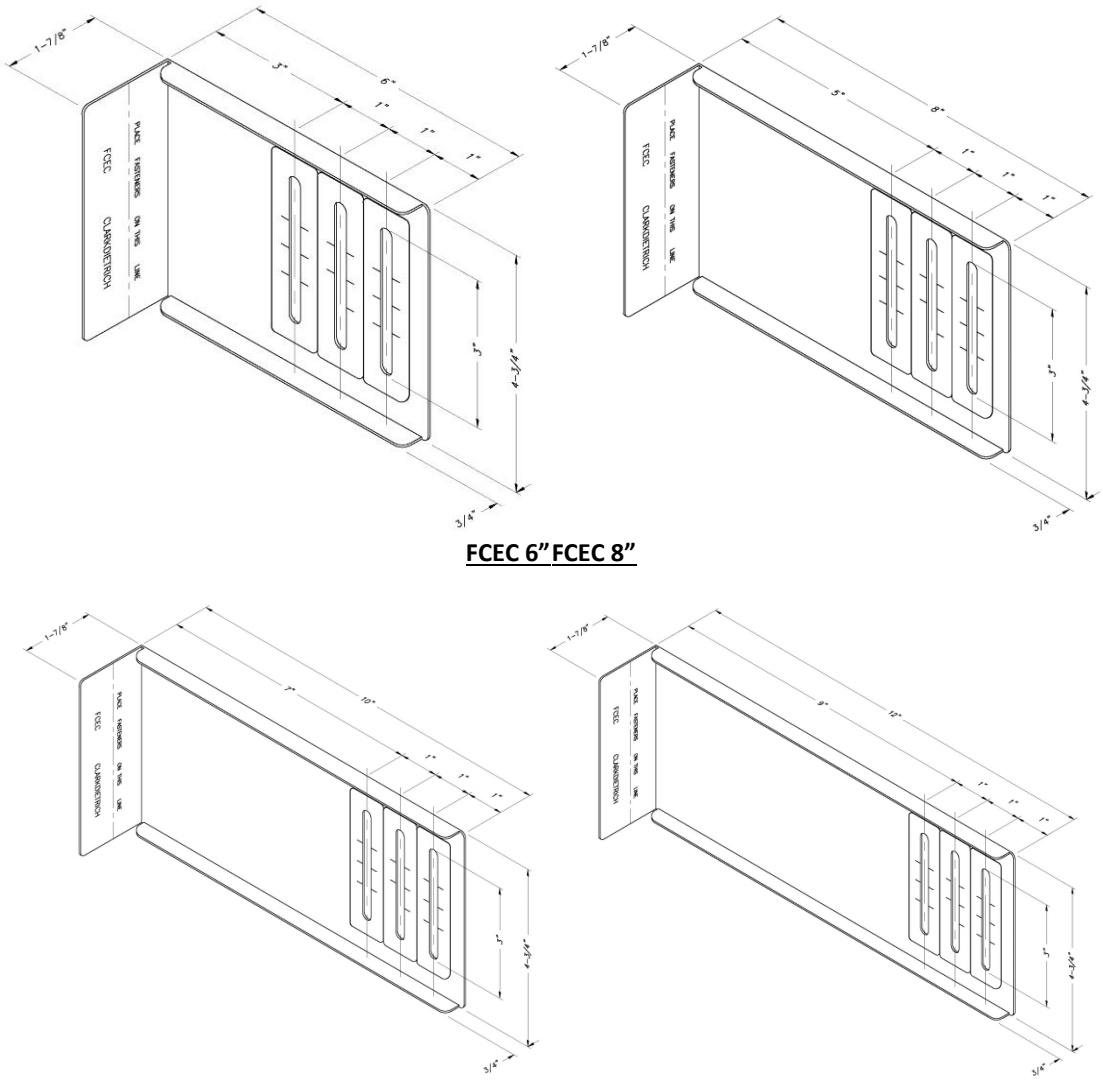
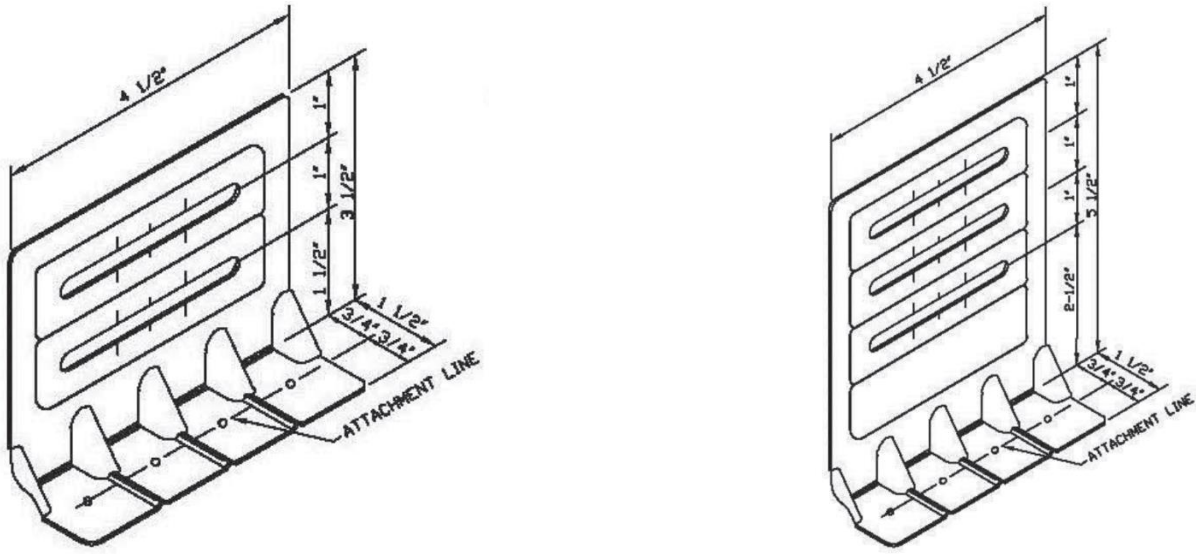


Figure 1 – ClarkDietrich *FastClip™* Extended Clips (FCEC)



FCSC 3-1/2" FCSC 5-1/2"

Figure 2 – ClarkDietrich *FastClip™* Slide Clips (FCSC)

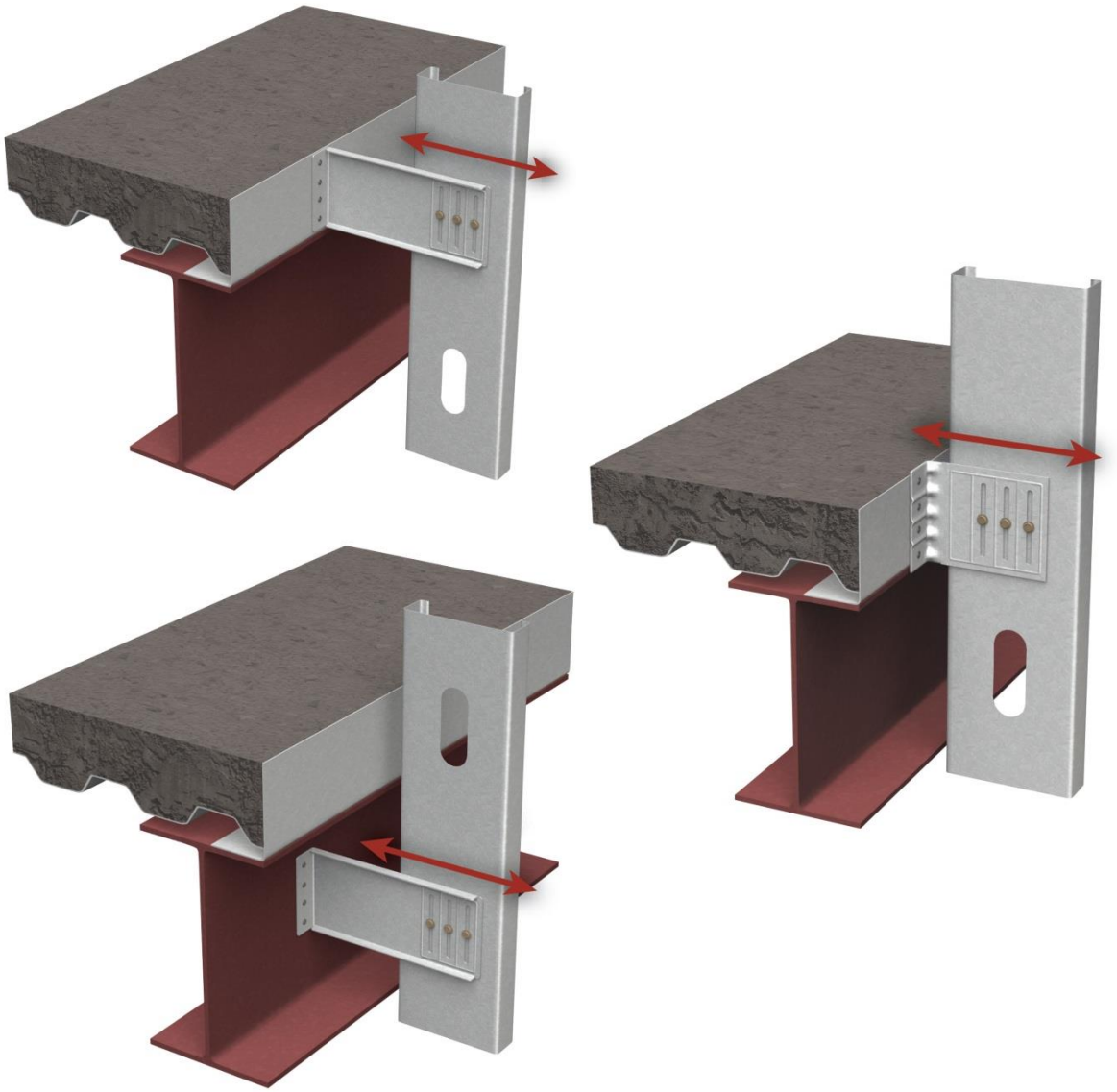


Figure 3 – FCSC and FCEC Typical Installation and Load Direction