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DIVISION: 05 00 00 – METALS

Section: 05 40 00 – Cold Formed Metal Framing

Section: 05 41 00 – Structural Metal Stud Framing

DIVISION: 09 00 00 – FINISHES

Section: 09 22 16.13 – Non-Structural Metal Stud Framing

REPORT HOLDER:

ClarkDietrich Building Systems, LLC
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REPORT SUBJECT:

ClarkDietrich™ Structural Studs and Track

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2015 *International Building Code*® (IBC)
- 2015 *International Residential Code*® (IRC)
- 2014 *Florida Building Code* (see Section 9)
- 2016 *California Building Code* (see Section 9)
- 2016 *California Residential Code* (see Section 9)

1.2 ClarkDietrich™ Structural Studs and Track has been evaluated for the following properties (see Table 1):

- Structural Performance

1.3 ClarkDietrich™ Structural Studs and Track has been evaluated for the following uses (see Table 1):

- Exterior and interior load-bearing applications

2.0 STATEMENT OF COMPLIANCE

ClarkDietrich™ Structural Studs and Track complies 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.

3.0 DESCRIPTION

3.1 General – Studs and tracks are produced in accordance with ASTM C955, fabricated from steel coil conforming to ASTM A1003 Structural Grade 33 Type H and Structural Grade 50 Type H. The steel has a protective coating meeting the minimum requirements of ASTM C955. See Table 2.

3.2 Structural studs are pre-punched with knockouts spaced every 24 inches throughout the stud length and shall not be located less than 10 inches from the end of the member to the near edge of the web knockout. Knockout hole dimensions for stud depths of 2-1/2" are 3/4" wide and 4" tall. For stud depths of 3-1/2" or greater, knockout holes are 1-1/2" wide and 4" tall.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Reference the attached ClarkDietrich™ Building Systems Cold-Formed Structural Framing Product Technical Design Guide for design capacities established in accordance with AISI S100.

4.2 Load-bearing conditions must be checked for stud member end reactions (resulting from allowable heights and loads) and for web crippling per the tables identified in the attached Cold-Formed Structural Framing Product Technical Design Guide.

4.3 For construction governed by the FBC High Velocity Hurricane Zone (HVHZ), the interior wall heights are limited to the heights at the L/240 and L/360 deflection levels.

5.0 INSTALLATION

Installation shall be in accordance with the applicable code and referenced AISI standards therein for cold-formed steel light-frame construction, including: IBC Section 2211, FBC-B Section 2211, CBC Section 2211, and Sections R505, R603, and R804 of the IRC, FBC-R, and CRC.



6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 All designs and calculations shall be prepared by a licensed design professional according to the requirements in the jurisdiction where the project is located.

6.3 Jobsite manufacturing of studs or tracks is outside the scope of this report.

6.4 Wall studs subjected to lateral loads not tabulated shall be designed using the section properties per Section 4.1 of this report and the AISI specification.

6.5 The minimum base steel thickness of the section delivered to the jobsite must be a minimum of 95% of the design thickness.

6.6 ClarkDietrich™ Structural Studs and Track identified in this report are manufactured in accordance with the manufacturer's approved quality control system with inspections by Intertek. See Table 3 for approved manufacturing locations.

6.7 The ClarkDietrich™ Structural Studs and Track is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-647).

7.0 SUPPORTING EVIDENCE

7.1 Manufacturer's drawings and installation instructions.

7.2 Reports of testing and engineering analysis in accordance with ICC-ES AC46, Acceptance Criteria for Cold-formed Steel Framing Members, revised April 2015. See Table 1 Code Referenced Standards for a list of the code referenced standards reviewed and deemed equivalent with code editions listed in this report.

7.3 Reports of evaluation and engineering analysis in accordance with AISI S100-12, North American Specification for the Design of Cold-Formed Steel Structural Members.

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

8.0 IDENTIFICATION

The ClarkDietrich™ Structural Studs and Track are identified with:

- The manufacturer's name (ClarkDietrich Building Systems, LLC);
- Address and telephone number;
- The product name (ClarkDietrich™ Structural Studs and Track);
- The size and member designation;
- Minimum base steel thickness (uncoated) in decimals or mils;
- Yield Strength;
- Galvanization coating designation: CP60 or CP90; and
- The Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0206).



9.0 OTHER CODES

9.1 FLORIDA BUILDING CODE

9.1.1 Scope of Evaluation: The ClarkDietrich™ Structural Studs and Track were evaluated for compliance with the 2014 Florida Building Code – Building and Florida Building Code – Residential. the 2014 Florida Building Code – Building, Florida Building Code – Residential and Florida Building Code – Energy Conservation.

9.1.2 Conclusion: Conclusion: The ClarkDietrich™ Structural Studs and Track, described in Sections 2 through 7 of this Research Report, comply with the 2014 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 ClarkDietrich™ Structural Studs and Track were evaluated for compliance with the 2016 California Building Code and California Residential Code.

9.2.2 Conclusion: The ClarkDietrich™ Structural Studs and Track, described in Sections 2 through 7 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.

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TABLE 1 – CODE REFERENCED STANDARDS

2015 IBC	2014 FBC	2016 CBC
AISI S100-12	AISI S100-07	AISI S100-07
AISI S200-12	AISI S200-07	AISI S200-12
ASTM C955-11c Section 8	ASTM C955-09	ASTM C955-11c Section 8

TABLE 2 – COATING DESIGNATIONS

Coating Designator	Minimum Coating Requirements			
	Zinc-Coated ^A oz/ft ² (g/m ²) ^F	Zinc Iron ^B oz/ft ² (g/m ²) ^F	55% Al-Zinc ^C oz/ft ² (g/m ²) ^F	Zinc-5% ^D oz/ft ² (g/m ²) ^F
CP 60	G 60 [Z180] ^F	A 60 [ZF 180] ^F	AZ 50 [AZM 150] ^F	GF 30 [ZGF 90] ^F
CP 90	G 90 [Z275] ^F	Not Applicable	AZ50 [AZM 150] ^F	GF 45 [ZGF 135] ^F

^A Zinc-coated steel sheet described in Specification A653 / A653M.

^B Zinc-iron alloy-coated steel sheet as described in Specification A653 / A653M.

^C 55% Aluminum-zinc alloy-coated steel sheet as described in Specification A792 / A792M.

^D Zinc-5% aluminum alloy-coated steel sheet as described in Specification A875 / A875M.

^F The SI (metric) values given in parentheses are provided for information purposes only.



TABLE 3 – STRUCTURAL STUDS AND TRACK MANUFACTURING LOCATIONS

ClarkDietrich® Building System - BALTIMORE 4601 North Point Boulevard Baltimore, MD 21219	ClarkDietrich® Building System – MCDONOUGH 330 Greenwood Place McDonough, GA 30253
ClarkDietrich® Building System - BAYTOWN 4200 Cedar Boulevard Baytown, TX 77520	ClarkDietrich® Building System - RIVERSIDE 6510 General Drive Riverside, CA 92509
ClarkDietrich® Building System – BRISTOL 780 James P. Casey Road Bristol, CT 06010	ClarkDietrich® Building System – ROCHELLE 501 Stewart Road Rochelle, IL 61068
ClarkDietrich® Building System – DADE CITY 38020 Pulp Drive Dade City, FL 33523	ClarkDietrich® Building System – VIENNA 1455 Ridge Road Vienna Township, OH 44473
ClarkDietrich® Building System – DALLAS 10340 Denton Drive Dallas, TX 75220	ClarkDietrich® Building System – WOODLAND 1685 Tide Court Woodland, CA 95776