



Listing and Technical Evaluation Report™

Report No: 2211-03



Issue Date: May 30, 2024

Revision Date: March 4, 2025

Subject to Renewal: July 1, 2025

ClarkDietrich® Post Cap and Base Products

Trade Secret Report Holder:

ClarkDietrich® Building Systems, LLC

Phone: 513-870-1100 Website: www.clarkdietrich.com Email: info@clarkdietrich.com

CSI Designations:

DIVISION: 06 00 00 - WOOD, PLASTICS AND COMPOSITES

Section: 06 05 23 - Wood, Plastic, and Composite Fastenings

1 Innovative Products Evaluated¹

- 1.1 ClarkDietrich Post Cap and Base Products:
 - 1.1.1 CDPB4
 - 1.1.2 CDAA44, CDAA46 and CDAA66 (includes a stand-off plate)
 - 1.1.3 CDDA44, CDDA46 and CDDA66
 - 1.1.4 CDPC44 and CDPC66

2 Product Description and Materials

2.1 The innovative products evaluated in this report are shown in **Figure 1** through **Figure 4**, and are as described in **Table 1** and **Table 2**.

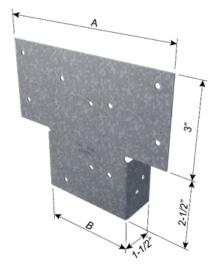


Figure 1. CDPB4 Post Beam Cap





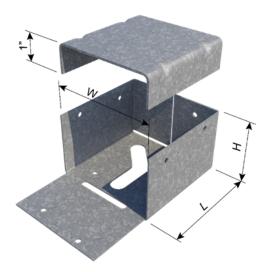


Figure 2. CDAA44, CDAA46 and CDAA66 Adjustable Anchors

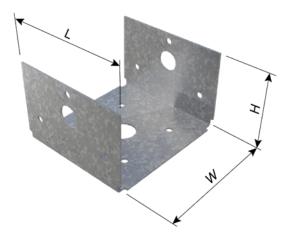


Figure 3. CDDA44, CDDA46 and CDDA66 Deck Anchors

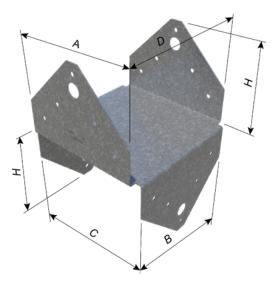


Figure 4. CDPC44 and CDPC66 Post Cap





 Table 1. ClarkDietrich Post Cap and Base Products Information

Product	Description	Use	Materials	Dimensions
CDPB4	Post beam caps that may be installed before, during, or after erecting beams. These caps must be used in pairs.	Post Beam Cap for 4 x 4, 4 x 6 and 4 x 8 posts	0.0428" (18-gauge	See Figure 1 . A: 6 ⁷ / ₁₆ " (164 mm) B: 3 ⁹ / ₁₆ " (90 mm)
CDAA44		Adjustable Anchor for 4 x 4 post	galvanized cold formed steel)	See Figure 2 . Length: 3 ⁹ / ₁₆ " (90 mm) Width: 3 ⁹ / ₁₆ " (90 mm) Height: 2 ⁹ / ₃₂ " (58 mm)
CDAA46	Adjustable post base with moisture protection by keeping post end 1 ³ / ₁₆ " above anchoring surface	Adjustable Anchor for 4 x 6 post	0.0538" (16-gauge	See Figure 2 . Length: 3 ⁹ / ₁₆ " (90 mm) Width: 5 ¹ / ₂ " (140 mm) Height: 2 ⁷ / ₈ " (73 mm)
CDAA66		Adjustable Anchor for 6 x 6 post	galvanized cold formed steel)	See Figure 2 . Length: 5 ¹ / ₂ " (140 mm) Width: 5 ¹ / ₂ " (140 mm) Height: 2 ¹³ / ₁₆ " (71 mm)
CDAAXXP Stand-off Plate	Placed inside of adjustable post bases to keep the post above the anchoring surface and provide a flat surface	For use with Adjustable Anchor CDAA series	0.0677" (14-gauge galvanized cold formed steel)	See Figure 2 Length and width of Standoff Plate fits within the cavity of CDAA44, CDAA46, and CDAA66. Height: 1" (25 mm)
CDDA44		Deck Anchor for 4 x 4 post		See Figure 3 . Length: 3 ¹ / ₄ " (83 mm) Width: 3 ⁹ / ₁₆ " (90 mm) Height: 2 ¹ / ₄ " (57 mm)
CDDA46	Deck anchors that eliminate the need for toenailing of the post or column. The bottom bolt hole can be used to set into concrete	Deck Anchor for 4 x 6 post	0.0428" (18-gauge galvanized cold formed steel)	See Figure 3 . Length: 3" (76 mm) Width: 5 ⁹ / ₁₆ " (140 mm) Height: 2 ¹ / ₂ " (73 mm)
CDDA66		Deck Anchor for 6 x 6 post		See Figure 3 . Length: 5" (127 mm) Width: 5 ⁹ / ₁₆ " (141 mm) Height: 2 ¹ / ₂ " (64 mm)





Table 1. ClarkDietrich Post Cap and Base Products Information

Product	Description	Use	Materials	Dimensions
				See Figure 4.
				A: 3 ¹ / ₄ " (83 mm)
CDDC44		Post Cap		B: 3 ¹ / ₄ " (83 mm)
CDPC44		for 4 x 4 post		C: 3 ⁹ / ₁₆ " (90 mm)
	One piece designed post cap with no spot welds as possible weak points. Acts as both a post cap and post base.			D: 3 ⁹ / ₁₆ " (90 mm)
				H: 3" (76 mm)
				See Figure 4.
				A: 5" (127 mm)
CDDCcc		Post Cap		B: 5" (127 mm)
CDPC66		for 6 x 6 post		C: 5 ¹ / ₂ " (140 mm)
				D: 5 ¹ / ₂ " (140 mm)
				H: 3 ³ / ₄ " (95 mm)
SI: 1 in = 25.4 mm				

2.2 All thicknesses listed in **Table 1** are the minimum base metal thickness for the gauge of steel listed for each product. **Table 2** provides a cross reference for determining the design thickness for each gauge of steel.

Table 2. Cross-Reference for the Design /Thickness of Steel Based on the Minimum Base-Metal Thickness of Various Steel Gauges

Design Thickness, inch (gauge)	Minimum Base-Metal Thickness, (inch)
0.0713 (14)	0.0677
0.0566 (16)	0.0538
0.0451 (18)	0.0428
SI: 1 in = 25.4 mm	

2.3 As needed, review material properties for design in **Section 6** and to regulatory evaluation in **Section 8**.

3 Definitions

- 3.1 New Materials² are defined as building materials, equipment, appliances, systems, or methods of construction not provided for by prescriptive and/or legislatively adopted regulations, known as alternative materials.³ The design strengths and permissible stresses shall be established by tests⁴ and/or engineering analysis.⁵
- 3.2 <u>Duly Authenticated Reports</u>⁶ and <u>Research Reports</u>⁷ are test reports and related engineering evaluations, which are written by an <u>approved agency</u>⁸ and/or an <u>approved source</u>.⁹
 - 3.2.1 These reports contain intellectual property and/or trade secrets, which are protected by the <u>Defend Trade</u> Secrets Act (DTSA).¹⁰
- 3.3 An <u>approved agency</u> is "approved" when it is <u>ANAB ISO/IEC 17065 accredited</u>. DrJ Engineering, LLC (DrJ) is listed in the ANAB directory.
- 3.4 An <u>approved source</u> is "approved" when a professional engineer (i.e., <u>Registered Design Professional</u>) is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the <u>state legislature</u> via its professional engineering regulations.¹¹





- 3.5 Testing and/or inspections conducted for this <u>Duly Authenticated Report</u> were performed by an <u>ISO/IEC 17025</u> accredited testing laboratory, an <u>ISO/IEC 17020</u> accredited inspection body, and/or a licensed <u>Registered Design Professional</u> (RDP).
 - 3.5.1 The Center for Building Innovation (CBI) is ANAB 12 ISO/IEC 17025 and ISO/IEC 17020 accredited.
- 3.6 The regulatory authority shall <u>enforce</u>¹³ the specific provisions of each legislatively adopted regulation. If there is a non-conformance, the specific regulatory section and language of the non-conformance shall be provided in <u>writing</u>¹⁴ stating the nonconformance and the path to its cure.
- 3.7 The regulatory authority shall accept <u>Duly Authenticated Reports</u> from an <u>approved agency</u> and/or an <u>approved source</u> with respect to the quality and manner of use of new materials or assemblies as provided for in regulations regarding the use of alternative materials, designs, or methods of construction.¹⁵
- 3.8 ANAB is an International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA with the appropriate scope, shall be approved. 16 Therefore, all ANAB ISO/IEC 17065 Duly Authenticated Reports are approval equivalent. 17
- 3.9 Approval equity is a fundamental commercial and legal principle. 18

4 Applicable Standards for the Listing; Regulations for the Regulatory Evaluation 19

- 4.1 Standards
 - 4.1.1 AISI S100: North American Specification for the Design of Cold-Formed Steel Structural Members
 - 4.1.2 AISI S913: Test Standard for Determining the Strength and Deformation Behavior of Hold-Downs Attached to Cold-Formed Steel Structural Framing
 - 4.1.3 ANSI/AISC 360: Specification for Structural Steel Buildings
 - 4.1.4 ANSI/AWC NDS: National Design Specification (NDS) for Wood Construction
 - 4.1.5 ASTM A370: Standard Test Methods and Definitions for Mechanical Testing of Steel Products
 - 4.1.6 ASTM F1575: Standard Test Method for Determining Bending Yield Moment of Nails
- 4.2 Regulations
 - 4.2.1 IBC 15, 18, 21: International Building Code®
 - 4.2.2 IRC 15, 18, 21: International Residential Code®
 - 4.2.3 IECC 15, 18, 21: International Energy Conservation Code®
 - 4.2.4 CBC—19, 22: California Building Code²⁰ (Title 24, Part 2)
 - 4.2.5 CRC—19, 22: California Residential Code²⁰ (Title 24, Part 2.5)
 - 4.2.6 CEC —19, 22: California Energy Code (Title 24, Part 6)

5 Listed²¹

5.1 Equipment, materials, products or services included in a List published by a <u>nationally recognized testing</u> <u>laboratory</u> (i.e., CBI), <u>approved agency</u> (i.e., CBI and DrJ), and/or <u>approved source</u> (i.e., DrJ) or other organization concerned with product evaluation (i.e., DrJ) that maintains periodic inspection (i.e., CBI) of production of listed equipment or materials, and whose listing states either that the equipment or material meets nationally recognized standards or has been tested and found suitable for use in a specified manner.





6 Tabulated Properties Generated from Nationally Recognized Standards

6.1 General

- 6.1.1 ClarkDietrich Post Cap and Base Products are used to resist uplift, lateral and/or gravity loads imposed on connections in light-frame construction per <u>IBC Section 2308</u>, and heavy timber construction per <u>IBC Section 2304.11</u>.
- 6.1.2 ClarkDietrich Post Cap and Base Products may be used as connectors for wood framing in accordance with <u>IBC Section 2304.10</u> and <u>IRC Section R301</u>.
- 6.1.3 The <u>RDP</u> for the project shall determine which type of product is appropriate using **Table 3** through **Table 6** in **Section 6**.
- 6.1.4 Tabulated allowable loads in **Section 6** apply to wood used in dry conditions and where sustained temperatures are below 100° F.
 - 6.1.4.1 When connectors are installed in conditions exposed to temperatures exceeding 100° F, the allowable loads shall be adjusted by the applicable temperature factor (Ct) specified in NDS.
 - 6.1.4.2 When connectors are installed in wood having a moisture content of greater than nineteen percent (19%), sixteen percent (16%) for engineered wood products, or where wet service conditions are expected over the life of the connector, the allowable loads must be adjusted by the wet service factor (C_M) specified in NDS.

Table 3. Allowable Loads and Fastener Schedules for CDPB4 Post Beam Cap^{1,2,3}

Part Number	Minimum			Faste	Allowable Loads¹ (lb) Wood Species (Specific Gravity)							
	Thickness,	Load Orientation ²	Post		Beam		HF/SPF (0.42)		DF-L (0.50)		SP (0.55)	
	(gauge)		Fastener Qty.	Otv	Fastener	Qty.		L	oad Du	ration,	C _D	
				Qty.			1.0	1.6	1.0	1.6	1.0	1.6
	0.0428 (18)	Uplift	0.162" x 3 ¹ / ₂ " Nail	8 (4 per connector) 14 (7 per connector)	0.162" x 3 ¹ / ₂ " Nail	8 (4 per connector)	675	710	1,040	1,100	1,210	1,395
		Lateral – F1					1,160	1,160	1,115	1,160	960	1,005
		Uplift				14 (7 per	1,180	1,215	1,820	1,875	2,115	2,380
CDPB4		Lateral – F1				connector)	1,270	1,270	1,475	1,475	1,550	1,550
CDI D4		Uplift		8 (4 per		8 (4 por	620	995	960	1,535	1,220	1,950
		Lateral – F1	#9 x 3"	connector)	#9 x 3" Screw	(4 per connector)	1,105	1,410	1,285	1,455	1,395	1,455
		Uplift	Screw	14 /7 por		14 (7 per	1,085	1,740	1,680	2,685	2,130	3,410
		Lateral – F1		(7 per connector)		(7 per connector)	1,515	1,515	1,760	1,760	1,905	1,905

- 1. Allowable loads shall be selected based on the load duration as permitted by the applicable building code.
- 2. Lateral F1 direction is parallel to beam.
- 3. CDPB4 post beam caps must be installed in pairs.









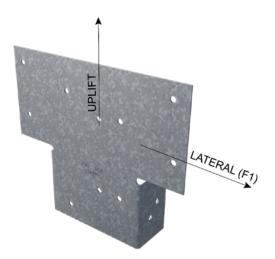


Figure 5. Load Diagram for CDPB4





Table 4. Allowable Loads and Fastener Schedules for CDAA44, CDAA46 and CDAA66 Adjustable Anchors

				Allowable Loads ^{1,3} (lb)									
	Minimum Thickness, in. (gauge)	Load Orientation ²		Wood Species (Specific Gravity)									
Part Number			Post		Anchor P	Anchor Point		HF/SPF (0.42)		DF-L (0.50)		SP (0.55)	
			_ ,	04	_ ,	į	Load Duration, C _D						
			Fastener	Qty.	Fastener	Qty.	1.0	1.6	1.0	1.6	1.0	1.6	
		Uplift					510	510	575	575	590	590	
		Gravity	0.148" x 3"				2,170	2,170	2,950	2,950	2,970	2,970	
		Lateral – F1	Nail		4/ 11 1 - 10 - 20		285	285	330	330	355	355	
CDAA44	0.0428	Lateral – F2		۰	¹ / ₂ " bolt with 3" x 3" x ³ / ₁₆ "	4	430	430	500	500	540	540	
CDAA44	(18-gauge)	Uplift		8	commodity	1	375	375	435	435	470	470	
		Gravity	#9 x 3" Screw		washer		2,150	2,150	2,940	2,940	3,105	3,105	
		Lateral – F1					365	365	425	425	555	555	
		Lateral – F2					370	370	430	430	465	465	
		Uplift	0.148" x 3" Nail	. 11	1/2" bolt with 3" x 3" x 3/16" commodity washer	1	790	790	915	915	990	990	
		Gravity					3,035	3,035	4,130	4,130	4,200	4,200	
		Lateral – F1					315	315	365	365	390	390	
CDAA46	0.0538	Lateral – F2					555	555	640	640	695	695	
CDAA40	(16-gauge)	Uplift		11		'	595	595	685	685	745	745	
		Gravity	#9 x 3"		wasilei		3,225	3,225	4,415	4,415	4,545	4,545	
		Lateral – F1	Screw				335	335	390	390	535	535	
		Lateral – F2					370	370	425	425	460	460	
		Uplift					725	725	835	835	855	855	
		Gravity	0.148" x 3"				4,415	4,415	6,035	6,035	6,035	6,035	
		Lateral – F1	Nail		¹ / ₂ " bolt with		995	995	1,150	1,150	1,235	1,235	
CDAA66	0.0538	Lateral – F2		13	3" x 3" x ³ / ₁₆ "	1	875	875	995	995	995	995	
ODAAOO	(16-gauge)	Uplift	#9 x 3"	13	commodity washer	ı	575	575	665	665	715	715	
		Gravity			wasiici		3,890	3,890	5,340	5,340	5,435	5,435	
		Lateral – F1	Screw				575	575	665	665	840	840	
		Lateral – F2					645	645	745	745	805	805	

^{1.} Allowable loads shall be selected based on the load duration as permitted by the applicable building code.

^{2.} F1 direction is parallel to substrate member.

^{3.} F2 direction is parallel to the substrate member.







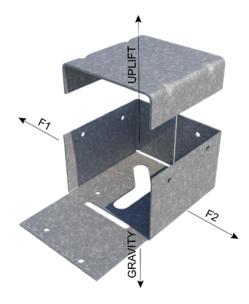


Figure 6. Load Diagram for CDAA Adjustable Anchors

Table 5. Allowable Loads and Fastener Schedules for CDDA44, CDDA46 and CDDA66 Deck Anchors

			ı	Allowable Loads ¹ (lb)								
	Minimum	Load Orientation ²		Wood Species (Specific Gravity)								
	Thickness, in. (gauge)		Post		Substrate		HF/SPF (0.42)		DF-L (0.50)		SP (0.55)	
			F4	Qty.	Fastener	Qty.		ı	oad Dur	ation, C)	
			Fastener				1.0	1.6	1.0	1.6	1.0	1.6
		Uplift	0.165" x		0.165" x 3 ¹ / ₂ " Nail		345	475	530	625	655	655
CDDA44		Lateral – F1	31/2" Nail				495	680	580	745	625	745
CDDA44		Uplift	#9 x 3"		#9 x 3" Screw		220	315	335	380	410	410
		Lateral – F1	Screw				280	445	325	520	350	560
		Uplift	0.165" x		0.165" x 3 ¹ / ₂ " Nail		160	160	250	250	300	300
CDDA46	0.0428 (18-gauge)	Lateral – F1	31/2" Nail	6			495	700	580	810	625	880
CDDA40		Uplift	#9 x 3"	0	#9 x 3"		170	170	215	215	235	235
		Lateral – F1	Screw		Screw		280	445	325	520	350	560
		Uplift	0.165" x		0.165" x		250	250	380	380	430	430
CDDA66		Lateral – F1	31/2" Nail		31/2" Nail		495	795	580	925	625	1,000
CDDA00		Uplift	#9 x 3"		#9 x 3"		220	230	295	295	315	315
		Lateral – F1	Screw		Screw		280	445	325	520	350	560

^{1.} Allowable loads shall be selected based on the load duration as permitted by the applicable building code.

^{2.} F1 direction is parallel to substrate member.









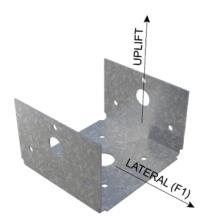


Figure 7. Load Diagram for CDDA Deck Anchors

Table 6. Allowable Loads and Fastener Schedules for CDPC44 and CDPC66 Post Cap

			Fasteners				Allowable Loads ¹ (lb)						
	Minimum Thickness, in (ga)						Wood Species (Specific Gravity)						
Part Number		Load Orientation ²	Post		Beam		HF/SPF (0.42)		DF-L (0.50)		SP (0.55)		
			Fastener		Fastener	Qty.	Load Duration, C _D						
				Qty.			C _D = 1.0	C _D = 1.6	C _D = 1.0	C _D = 1.6	C _D = 1.0	C _D = 1.6	
		Uplift	0.165" x	6	0.165" x 3 ¹ / ₂ " Nail #9 x 3" Screw	6	440	440	680	680	795	795	
CDPC44		Lateral – F1	31/2" Nail				525	525	610	610	665	665	
CDF C44		Uplift	#9 x 3"				325	340	485	510	525	550	
	0.0428	Lateral – F1	Screw				420	490	485	570	525	620	
	(18-gauge)	Uplift	0.165" x	10	0.165" x 3 ¹ / ₂ " Nail	10	855	905	1,040	1,040	1,040	1,040	
CDPC66		Lateral – F1	31/2" Nail				1,245	1,330	1,445	1,545	1,565	1,640	
CDPC00		Uplift	#9 x 3"	10	#9 x 3" Screw		545	585	720	720	780	780	
		Lateral – F1	Screw				700	1,010	810	1,170	875	1,265	

^{1.} Allowable loads shall be selected based on the load duration as permitted by the applicable building code.

^{2.} F1 direction is parallel to substrate member.





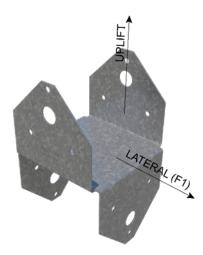


Figure 8. Load Diagram for CDPC Post Caps

6.2 Where the application falls outside of the performance evaluation, conditions of use and/or installation requirements set forth herein, alternative techniques shall be permitted in accordance with accepted engineering practice and experience. This includes but is not limited to the following areas of engineering: mechanics or materials, structural, building science, and fire science.

7 Certified Performance²²

- 7.1 All construction methods shall conform to accepted engineering practices to ensure durable, livable, and safe construction and shall demonstrate acceptable workmanship reflecting journeyman quality of work of the various trades.²³
- 7.2 The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur.²⁴

8 Regulatory Evaluation and Accepted Engineering Practice

- 8.1 ClarkDietrich Post Cap and Base Products were evaluated to determine the following:
 - 8.1.1 Structural performance of connectors under lateral, uplift and gravity load conditions.
 - 8.1.2 Performance for use in buildings in accordance with the standards and codes listed in **Section 4**.
- 8.2 Any building code, regulation, and/or accepted engineering evaluations (i.e., research reports, <u>Duly Authenticated Reports</u>, etc.) that are conducted for this Listing were performed by DrJ Engineering, LLC (DrJ), an <u>ISO/IEC 17065 accredited certification body</u> and a professional engineering company operated by <u>RDP/approved sources</u>. DrJ is qualified²⁵ to practice product and regulatory compliance services within its scope of accreditation and engineering expertise, respectively.
- 8.3 Engineering evaluations are conducted with DrJ's ANAB <u>accredited ICS code scope</u> of expertise, which are also its areas of professional engineering competence.
- 8.4 Any regulation specific issues not addressed in this section are outside the scope of this report.





9 Installation

- 9.1 Installation shall comply with the approved construction documents, the manufacturer installation instructions, this report and the applicable building code.
- 9.2 In the event of a conflict between the manufacturer installation instructions and this report, the more restrictive shall govern.
- 9.3 Installation Procedure
 - 9.3.1 Installation of these products shall be used with wood framing of appropriate dimensions (see **Table 1**).
 - 9.3.2 These innovative products shall be attached using the fasteners as indicated in the product specific table in **Section 6**.
 - 9.3.3 Completed installation shall have the product flush against the wood framing.

10 Substantiating Data

- 10.1 Testing has been performed under the supervision of a professional engineer and/or under the requirements of ISO/IEC 17025 as follows:
 - 10.1.1 Tensile strength testing in accordance with ASTM A370
 - 10.1.2 Gravity, uplift, and lateral load testing in accordance with AISI S913
 - 10.1.3 Bending yield testing in accordance with ASTM F1575
- 10.2 Information contained herein may include the result of testing and/or data analysis by sources that are approved agencies, approved sources, and/or RDPs. Accuracy of external test data and resulting analysis is relied upon.
- 10.3 Where pertinent, testing and/or engineering analysis are based upon provisions that have been codified into law through state or local adoption of regulations and standards. The developers of these regulations and standards are responsible for the reliability of published content. DrJ's engineering practice may use a regulation-adopted provision as the control. A regulation-endorsed control versus a simulation of the conditions of application to occur establishes a new material as being equivalent to the regulatory provision in terms of quality, strength, effectiveness, fire resistance, durability, and safety.
- 10.4 The accuracy of the provisions provided herein may be reliant upon the published properties of raw materials, which are defined by the grade mark, grade stamp, mill certificate, or Duly Authenticated Reports from approved agencies and/or approved sources provided by the supplier. These are presumed to be minimum properties and relied upon to be accurate. The reliability of DrJ's engineering practice, as contained in this Duly Authenticated Report, may be dependent upon published design properties by others.
- 10.5 Testing and engineering analysis: The strength, rigidity, and/or general performance of component parts and/or the integrated structure are determined by suitable tests that simulate the actual conditions of application that occur and/or by accepted engineering practice and experience.²⁶
- 10.6 Where additional condition of use and/or regulatory compliance information is required, please search for ClarkDietrich Post Cap and Base Products on the DrJ Certification website.

11 Findings

- 11.1 As outlined in **Section 6**, ClarkDietrich Post Cap and Base Products have performance characteristics that were tested and/or meet applicable regulations and are suitable for use pursuant to its specified purpose.
- 11.2 When used and installed in accordance with this <u>Duly Authenticated Report</u> and the manufacturer installation instructions, ClarkDietrich Post Cap and Base Products shall be approved for the following applications:
 - 11.2.1 Use as structural connectors for wood structures where the design values listed in **Section 6** meet the requirements of the building design.





- 11.3 Unless exempt by state statute, when ClarkDietrich Post Cap and Base Products are to be used as a structural and/or building envelope component in the design of a specific building, the design shall be performed by an RDP.
- 11.4 Any application specific issues not addressed herein can be engineered by an RDP. Assistance with engineering is available from ClarkDietrich Building Systems, LLC.
- 11.5 <u>IBC Section 104.11</u> (IRC Section R104.11 and IFC Section 104.10²⁷ are similar) in pertinent part states:
 - **104.11** Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code. Where the alternative material, design or method of construction is not approved, the building official shall respond in writing, stating the reasons the alternative was not approved.
- 11.6 Approved: 28 Building regulations require that the building official shall accept Duly Authenticated Reports. 29
 - 11.6.1 An approved agency is "approved" when it is ANAB ISO/IEC 17065 accredited.
 - 11.6.2 An <u>approved source</u> is "approved" when an <u>RDP</u> is properly licensed to transact engineering commerce.
 - 11.6.3 Federal law, <u>Title 18 US Code Section 242</u>, requires that where the alternative product, material, service, design, assembly, and/or method of construction is not approved, the building official shall respond in writing, stating the reasons why the alternative was not approved. Denial without written reason deprives a protected right to free and fair competition in the marketplace.
- 11.7 DrJ is a licensed engineering company, employs licensed <u>RDP</u>s and is an <u>ANAB-Accredited Product</u> Certification Body Accreditation #1131.
- 11.8 Through the <u>IAF Multilateral Agreements</u> (MLA), this <u>Duly Authenticated Report</u> can be used to obtain product approval in any <u>jurisdiction</u> or <u>country</u> because all ANAB ISO/IEC 17065 <u>Duly Authenticated Reports</u> are equivalent.³⁰

12 Conditions of Use

- 12.1 Material properties shall not fall outside the boundaries defined in **Section 6**.
- 12.2 As defined in **Section 6**, where material and/or engineering mechanics properties are created for load resisting design purposes, the resistance to the applied load shall not exceed the ability of the defined properties to resist those loads using the principles of accepted engineering practice.
- 12.3 As listed herein, ClarkDietrich Post Cap and Base Products shall not:
 - 12.3.1 Exceed the resistance assigned to the products as defined in this report.
- 12.4 Use of these ClarkDietrich Post Cap and Base Products in contact with fire-retardant treated wood or pressure-preservative treated wood is outside the scope of this report.
- 12.5 Structural framing members connected with the ClarkDietrich Post Cap and Base Products listed in **Section 1.1** shall be designed in accordance with the requirements of their specific design standards/specifications as referenced in the building code adopted by the jurisdiction in which the project is to be constructed.
- 12.6 Each of the ClarkDietrich Post Cap and Base Products that are exposed directly to weather or subject to salt corrosion in coastal areas as determined by the local building official, shall be protected in accordance with the building code adopted by the jurisdiction in which the project is to be constructed.
- 12.7 When required by adopted legislation and enforced by the <u>building official</u>, also known as the authority having jurisdiction (AHJ) in which the project is to be constructed:
 - 12.7.1 Any calculations incorporated into the construction documents shall conform to accepted engineering practice and, when prepared by an approved source, shall be approved when signed and sealed.
 - 12.7.2 This report and the installation instructions shall be submitted at the time of <u>permit</u> application.





- 12.7.3 These innovative products have an internal quality control program and a third-party quality assurance program.
- 12.7.4 At a minimum, these innovative products shall be installed per **Section 9** of this report.
- 12.7.5 The review of this report by the AHJ shall comply with IBC Section 104 and IBC Section 105.4.
- 12.7.6 These innovative products have an internal quality control program and a third party quality assurance program in accordance with <u>IBC Section 104.4</u>, <u>IBC Section 110.4</u>, <u>IBC Section 1703</u>, <u>IRC Section 1703</u>, <u>IRC Section 1704.4</u>, and IRC Section R109.2.
- 12.7.7 The application of these innovative products in the context of this report is dependent upon the accuracy of the construction documents, implementation of installation instructions, inspection as required by <u>IBC</u> Section 110.3, IRC Section R109.2, and any other regulatory requirements that may apply.
- 12.8 The approval of this report by the AHJ shall comply with <u>IBC Section 1707.1</u>, where legislation states in part, "the <u>building official</u> shall accept duly authenticated reports from <u>approved agencies</u> in respect to the quality and manner of <u>use</u> of new material or assemblies as provided for in <u>Section 104.11</u>," all of <u>IBC Section 104</u>, and IBC Section 105.4.
- 12.9 <u>Design loads</u> shall be determined in accordance with the regulations adopted by the <u>jurisdiction</u> in which the project is to be constructed and/or by the building designer (i.e., <u>owner</u> or <u>RDP</u>).
- 12.10 The actual design, suitability, and use of this report for any particular building, is the responsibility of the <u>owner</u> or the authorized agent of the owner.

13 Identification

- 13.1 The innovative products listed in **Section 1.1** are identified by a label on the board or packaging material bearing the manufacturer name, product name, this report number, and other information to confirm code compliance.
- 13.2 Additional technical information can be found at www.clarkdietrich.com.

14 Review Schedule

- 14.1 This report is subject to periodic review and revision. For the latest version, visit dricertification.org.
- 14.2 For information on the status of this report, please contact DrJ Certification.

15 Approved for Use Pursuant to U.S. and International Legislation Defined in Appendix A

15.1 ClarkDietrich Post Cap and Base Products (CDPB4, CDAA44, CDAA46, CDAA66 (includes a stand-off plate), CDDA44, CDDA46, CDDA66, CDPC44 and CDPC66) are included in this report published by an approved agency that is concerned with evaluation of products or services, maintains periodic inspection of the production of listed materials or periodic evaluation of services. This report states either that the material, product, or service meets recognized standards or has been tested and found suitable for a specified purpose. This report meets the legislative intent and definition of being acceptable to the AHJ.





Appendix A

1 Legislation that Authorizes AHJ Approval

- 1.1 **Fair Competition**: <u>State legislatures</u> have adopted Federal regulations for the examination and approval of building code referenced and alternative products, materials, designs, services, assemblies and/or methods of construction that:
 - 1.1.1 Advance innovation
 - 1.1.2 Promote competition so all businesses have the opportunity to compete on price and quality in an open market on a level playing field unhampered by anticompetitive constraints
 - 1.1.3 Benefit consumers through lower prices, better quality, and greater choice
- 1.2 Adopted Legislation: The following local, state, and federal regulations affirmatively authorize these innovative products to be approved by AHJs, delegates of building departments, and/or delegates of an agency of the federal government:
 - 1.2.1 Interstate commerce is governed by the <u>Federal Department of Justice</u> to encourage the use of innovative products, materials, designs, services, assemblies, and/or methods of construction. The goal is to "protect economic freedom and opportunity by promoting free and fair competition in the marketplace."
 - 1.2.2 <u>Title 18 US Code Section 242</u> affirms and regulates the right of individuals and businesses to freely and fairly have new products, materials, designs, services, assemblies, and/or methods of construction approved for use in commerce. Disapproval of alternatives shall be based upon non-conformance with respect to specific provisions of adopted legislation and shall be provided in writing <u>stating the reasons</u> why the alternative was not approved, with reference to the specific legislation violated.
 - 1.2.3 The <u>federal government</u> and each state have a <u>public records act</u>. In addition, each state also has legislation that mimics the federal <u>Defend Trade Secrets Act 2016</u> (DTSA),³¹ where providing test reports, engineering analysis and/or other related IP/TS is subject to <u>prison of not more than ten years</u>³² and/or a \$5,000,000 fine or 3 times the value of³³ the Intellectual Property (IP) and Trade Secrets (TS).
 - 1.2.3.1 Compliance with public records and trade secret legislation requires approval through the use of Listings, certified reports, Technical Evaluation Reports, Duly Authenticated Reports, and/or research reports prepared by approved agencies and/or approved sources.
 - 1.2.4 For <u>new materials</u>³⁴ that are not specifically provided for in any regulation, the <u>design strengths and</u> permissible stresses shall be established by <u>tests</u>, where <u>suitable load tests simulate the actual loads and conditions of application that occur</u>.
 - 1.2.5 The <u>design strengths and permissible stresses</u> of any structural material shall <u>conform</u> to the specifications and methods of design using accepted engineering practice.³⁵
 - 1.2.6 The commerce of <u>approved sources</u> (i.e., registered PEs) is regulated by <u>professional engineering</u> <u>legislation</u>. Professional engineering <u>commerce shall always be approved</u> by AHJs, except where there is evidence provided in writing, that specific legislation have been violated by an individual registered PE.
 - 1.2.7 The AHJ shall accept <u>Duly Authenticated Reports</u> from <u>approved agencies</u> in respect to the quality and manner of use of new materials or assemblies as provided for in <u>IBC Section 104.11</u>.³⁶





- 1.3 Approved³⁷ by Los Angeles: The Los Angeles Municipal Code (LAMC) states in pertinent part that the provisions of LAMC are not intended to prevent the use of any material, device, or method of construction not specifically prescribed by LAMC. The Department shall use Part III, Recognized Standards in addition to Part II, Uniform Building Code Standards of Division 35, Article 1, Chapter IX of the LAMC in evaluation of products for approval where such standard exists for the product or the material and may use other approved standards that apply. Whenever tests or certificates of any material or fabricated assembly are required by Chapter IX of the LAMC, such tests or certification shall be made by a testing agency approved by the Superintendent of Building to conduct such tests or provide such certifications. The testing agency shall publish the scope and limitation(s) of the listed material or fabricated assembly.³⁸ The Superintendent of Building Approved Testing Agency Roster is provided by the Los Angeles Department of Building and Safety (LADBS). The Center for Building Innovation (CBI) Certificate of Approval License is TA24945. Tests and certifications found in a DrJ Listing are LAMC approved. In addition, the Superintendent of Building shall accept Duly Authenticated Reports from approved agencies in respect to the quality and manner of use of new materials or assemblies as provided for in the California Building Code (CBC) Section 1707.1.³⁹
- 1.4 Approved by Chicago: The Municipal Code of Chicago (MCC) states in pertinent part that an Approved Agency is a Nationally Recognized Testing Laboratory (NRTL) acting within its recognized scope and/or a certification body accredited by the American National Standards Institute (ANSI) acting within its accredited scope. Construction materials and test procedures shall conform to the applicable standards listed in the MCC. Sufficient technical data shall be submitted to the building official to substantiate the proposed use of any product, material, service, design, assembly, and/or method of construction not specifically provided for in the MCC. This technical data shall consist of research reports from approved sources (i.e., MCC defined Approved Agencies).
- 1.5 **Approved by New York City**: The 2022 NYC Building Code (NYCBC) states in part that an <u>approved agency</u> shall be deemed⁴⁰ an approved testing agency via <u>ISO/IEC 17025 accreditation</u>, an approved inspection agency via <u>ISO/IEC 17020 accreditation</u>, and an approved product evaluation agency via <u>ISO/IEC 17065</u> <u>accreditation</u>. Accrediting agencies, other than federal agencies, must be members of an internationally recognized cooperation of laboratory and inspection accreditation bodies subject to a mutual recognition agreement⁴¹ (i.e., ANAB, International Accreditation Forum [IAF], etc.).
- 1.6 **Approved by Florida**: <u>Statewide approval</u> of products, methods, or systems of construction shall be approved, without further evaluation by:
 - 1.6.1 A certification mark or listing of an approved certification agency,
 - 1.6.2 A test report from an approved testing laboratory,
 - 1.6.3 A product evaluation report based upon testing or comparative or rational analysis, or a combination thereof, from an approved product evaluation entity, or
 - 1.6.4 A product evaluation report based upon testing, comparative or rational analysis, or a combination thereof, developed, signed and sealed by a professional engineer or architect, licensed in Florida.
 - 1.6.5 For local product approval, products or systems of construction shall demonstrate compliance with the structural wind load requirements of the Florida Building Code (FBC) through one of the following methods:
 - 1.6.5.1 A certification mark, listing or label from a commission-approved certification agency indicating that the product complies with the code,
 - 1.6.5.2 A test report from a commission-approved testing laboratory indicating that the product tested complies with the code,
 - 1.6.5.3 A product-evaluation report based upon testing, comparative or rational analysis, or a combination thereof, from a commission-approved product evaluation entity which indicates that the product evaluated complies with the code,





- 1.6.5.4 A product-evaluation report or certification based upon testing or comparative or rational analysis, or a combination thereof, developed and signed and sealed by a Florida professional engineer or Florida registered architect, which indicates that the product complies with the code, or
- 1.6.5.5 A statewide product approval issued by the Florida Building Commission.
- 1.6.6 The <u>Florida Department of Business and Professional Regulation</u> (DBPR) website provides a listing of companies certified as a <u>Product Evaluation Agency</u> (i.e., EVLMiami 13692), a <u>Product Certification Agency</u> (i.e., CER10642), and as a <u>Florida Registered Engineer</u> (i.e., ANE13741).
- 1.7 **Approved by Miami-Dade County (i.e., Notice of Acceptance [NOA])**: A Florida statewide approval is an NOA. An NOA is a Florida local product approval. By Florida law, Miami-Dade County shall accept the statewide and local Florida Product Approval as provided for in Florida legislation 553.842 and 553.8425.
- 1.8 **Approved by New Jersey**: Pursuant to the 2018 Building Code of New Jersey in <u>IBC Section 1707.1</u>

 <u>General</u>, ⁴² it states: "In the absence of approved rules or other approved standards, the building official shall accept duly authenticated reports from <u>approved agencies</u> in respect to the quality and manner of use of new materials or assemblies as provided for in the administrative provisions of the Uniform Construction Code (<u>N.J.A.C. 5:23</u>)". ⁴³ Furthermore N.J.A.C 5:23-3.7 states: "Municipal approvals of alternative materials, equipment, or methods of construction."
 - 1.8.1 **Approvals**: Alternative materials, equipment, or methods of construction shall be approved by the appropriate subcode official provided the proposed design is satisfactory and that the materials, equipment, or methods of construction are suitable for the intended use and are at least the equivalent in quality, strength, effectiveness, fire resistance, durability, and safety of those conforming with the requirements of the regulations.
 - 1.8.1.1 A field evaluation label and report or letter issued by a nationally recognized testing laboratory verifying that the specific material, equipment, or method of construction meets the identified standards or has been tested and found to be suitable for the intended use, shall be accepted by the appropriate subcode official as meeting the requirements of the above.
 - 1.8.1.2 Reports of engineering findings issued by nationally recognized evaluation service programs such as but not limited to, the Building Officials and Code Administrators (BOCA), the International Conference of Building Officials (ICBO), the Southern Building Code Congress International (SBCCI), the International Code Council (ICC), and the National Evaluation Service, Inc., shall be accepted by the appropriate subcode official as meeting the requirements of the above.
 - 1.8.2 The New Jersey Department of Community Affairs has confirmed that technical evaluation reports, from any accredited entity listed by ANAB, meets the requirements of item the previous paragraph, given that the listed entities are no longer in existence and/or do not provide "reports of engineering findings."
- 1.9 **Approved by the Code of Federal Regulations Manufactured Home Construction and Safety Standards**: Pursuant to Title 24, Subtitle B, Chapter XX, Part 3282.14 and Part 3280, the Department encourages innovation and the use of new technology in manufactured homes. The design and construction of a manufactured home shall conform to the provisions of Part 3282 and Part 3280 where key approval provisions in mandatory language follow:
 - 1.9.1 "All construction methods shall be in conformance with accepted engineering practices."
 - 1.9.2 "The strength and rigidity of the component parts and/or the integrated structure shall be determined by engineering analysis or by suitable load tests to simulate the actual loads and conditions of application that occur."
 - 1.9.3 "The design stresses of all materials shall conform to accepted engineering practice."





- 1.10 **Approval by US, Local and State Jurisdictions in General**: In all other local and state jurisdictions, the adopted building code legislation states in pertinent part that:
 - 1.10.1 For <u>new materials</u> that are not specifically provided for in this code, the <u>design strengths and permissible</u> <u>stresses</u> shall be established by tests.⁴⁶
 - 1.10.2 For innovative <u>alternatives</u> and/or methods of construction, the building official shall accept <u>Duly</u>

 <u>Authenticated Reports</u> from <u>approved agencies</u> with respect to the quality and manner of use of <u>new</u>
 materials or assemblies.⁴⁷
 - 1.10.2.1 An <u>approved agency</u> is "approved" when it is <u>ANAB ISO/IEC 17065 accredited</u>. DrJ Engineering, LLC (DrJ) is in the ANAB directory.
 - 1.10.2.2 An <u>approved source</u> is "approved" when an <u>RDP</u> is properly licensed to transact engineering commerce. The regulatory authority governing approved sources is the <u>state legislature</u> via its professional engineering regulations. ⁴⁸
 - 1.10.3 The <u>design strengths and permissible stresses</u> of any structural material...shall conform to the specifications and methods of design of accepted engineering practice performed by an <u>approved</u> source.⁴⁹
- 1.11 **Approval by International Jurisdictions**: The <u>USMCA</u> and <u>GATT</u> agreements provide for approval of innovative materials, designs, services, and/or methods of construction through the <u>Agreement on Technical Barriers to Trade</u> and the <u>IAF Multilateral Recognition Arrangement</u> (MLA), where these agreements:
 - 1.11.1 State that <u>conformity assessment procedures</u> (i.e., ISO/IEC 17020, 17025, 17065, etc.) are prepared, adopted, and applied so as to grant access for suppliers of like products originating in the territories of other Members under conditions no less favourable than those accorded to suppliers of like products of national origin or originating in any other country, in a comparable situation.
 - 1.11.2 **Approved**: The <u>purpose of the MLA</u> is to ensure mutual recognition of accredited certification and validation/verification statements between signatories to the MLA and subsequently, acceptance of accredited certification and validation/verification statements in many markets based on one accreditation for the timely approval of innovative materials, designs, services, and/or methods of construction.
 - 1.11.3 ANAB is an <u>IAF-MLA</u> signatory where recognition of certificates, validation, and verification statements issued by conformity assessment bodies accredited by all other signatories of the IAF MLA, with the appropriate scope, shall be approved.⁵⁰
 - 1.11.4 Therefore, all ANAB ISO/IEC 17065 <u>Duly Authenticated Reports</u> are approval equivalent.⁵¹
- 1.12 Approval equity is a fundamental commercial and legal principle. 52





Issue Date: May 30, 2024

Subject to Renewal: July 1, 2025

CBC and CRC Supplement to Report Number 2211-03

REPORT HOLDER: ClarkDietrich® Building Systems, LLC

1 Evaluation Subject

- 1.1 ClarkDietrich Post Cap and Base Products:
 - 1.1.1 CDPB4
 - 1.1.2 CDAA44, CDAA46 and CDAA66
 - 1.1.3 CDDA44, CDDA46 and CDDA66
 - 1.1.4 CDPC44 and CDPC66

2 Purpose and Scope

- 2.1 Purpose
 - 2.1.1 The purpose of this Report Supplement is to show ClarkDietrich Post Cap and Base Products, recognized in Report Number, 2211-03 have also been evaluated for compliance with the codes listed below.
- 2.2 Applicable Code Editions
 - 2.2.1 CBC—19, 22: California Building Code (Title 24, Part 2)
 - 2.2.2 CRC—19, 22: California Residential Code (Title 24, Part 2.5)
 - 2.2.3 CEC —19, 22: California Energy Code (Title 24, Part 6)

3 Conclusions

- 3.1 ClarkDietrich Post Cap and Base Products, described in Report Number 2211-03, comply with the CBC and CRC and are subject to the conditions of use described in this supplement.
- 3.2 Where there are variations between the IBC and IRC and the CBC and CRC applicable to this report, they are listed here:
 - 3.2.1 CBC Section 104.11 replaces IBC Section 104.11.
 - 3.2.2 CBC Section 1707.1 replaces IBC Section 1707.1.
 - 3.2.3 CRC Section R104.11 replaces IRC Section R104.11.

4 Conditions of Use

- 4.1 ClarkDietrich Post Cap and Base Products, described in Report Number 2211-03, must comply with all of the following conditions:
 - 4.1.1 All applicable sections in Report Number 2211-03.
 - 4.1.2 The design, installation, and inspections are in accordance with additional requirements of CBC and CRC, as applicable.





Notes

- For more information, visit dricertification.org or call us at 608-310-6748.
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1702
- Alternative Materials, Design and Methods of Construction and Equipment: The provisions of any regulation code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by a regulation. Please review https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104.11
- 4 https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706:~:text=the%20design%20strengths%20and%20permissible%20stresses%20shall%20be%20established%20by%20tests%20as
- The design strengths and permissible stresses of any structural material shall conform to the specifications and methods of design of accepted engineering practice. https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706:~:text=shall%20conform%20to%20the%20specifications%20and%20methods%20of%20design%20of%20accepted%20engineering%20practice
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1703.4.2
- 8 https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_agency
- https://up.codes/viewer/wyoming/ibc-2021/chapter/2/definitions#approved_source
- https://www.law.cornell.edu/uscode/text/18/1832 (b) Any organization that commits any offense described in subsection (a) shall be fined not more than the greater of \$5,000,000 or 3 times the value of the stolen trade secret to the organization, including expenses for research and design and other costs of reproducing the trade secret that the organization has thereby avoided. The federal government and each state have a public records act. To follow DTSA and comply state public records and trade secret legislation requires approval through ANAB ISO/IEC 17065 accredited certification bodies or approved sources. For more information, please review this website: Intellectual Property and Trade Secrets.
- https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/
- 12 https://www.cbitest.com/accreditation/

https://iaf.nu/en/about-iaf-

- 13 https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104:~:text=to%20enforce%20the%20provisions%20of%20this%20code
- https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-administration#104.11:~:text=Where%20the%20alternative%20material%2C%20design%20or%20method%20of%20construction%20is%20not%20approved%2C%20the%20building%20official%20shall%20respond%20in%20writing%2C%20stating%20the%20reasons%20why%20the%20alternative%20was%20not%20approved AND https://up.codes/viewer/colorado/ibc-2021/chapter/1/scope-and-
 - $\frac{\text{administration}\#105.3.1:\sim:\text{text}=\text{If}\%20\text{the}\%20\text{application}\%20\text{of}\%20\text{the}\%20\text{construction}\%20\text{documents}\%20\text{do}\%20\text{not}\%20\text{conform}\%20\text{to}\%20\text{the}\%20\text{reguirements}\%20\text{of}\%20\text{pertinen}\\ \frac{\text{t}\%20\text{laws}\%2C\%20\text{the}\%20\text{building}\%20\text{of}\text{ficial}\%20\text{shall}\%20\text{reject}\%20\text{such}\%20\text{application}\%20\text{in}\%20\text{writing}\%2C\%20\text{stating}\%20\text{the}\%20\text{reasons}\%20\text{the}\text{refore}\\ \frac{\text{t}\%20\text{laws}\%2C\%20\text{stating}\%20\text{the}\%20\text{reasons}\%20\text{the}\%20\text{t$
- https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1707.1:~:text=the%20building%20official%20shall%20accept%20duly%20authenticated%20reports%20from%20approved%20agencies%20in%20respect%20to%20the%20 guality%20and%20manner%20of%20use%20of%20mew%20materials%20or%20assemblies%20as%20provided%20for%20in%20Section%20104.11
- mla/#:~:text=it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessment%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%201AF%20MLA%2C%20with%20the%20appropriate%20scope
- True for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission
- Unless otherwise noted, all references in this Listing are from the 2021 version of the codes and the standards referenced therein. This material, product, design, service and/or method of construction also complies with the 2000-2021 versions of the referenced codes and the standards referenced therein.
- 20 All references to the CBC and CRC are the same as the 2021 IBC and 2021 IRC unless otherwise noted in the CBC and CRC Supplement at the end of this report.
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#p-3280.2(Listed%20or%20certified); https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#listed AND https://up.codes/viewer/colorado/ibc-2021/chapter/2/definitions#labeled
- 22 https://up.codes/viewer/colorado/ibc-2021/chapter/17/special-inspections-and-tests#1703.4
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=All%20construction%20methods%20shall%20be%20in%20conformance%20with%20accepted%20engineering%20practices%20to%20insure%20durable%2C%20livable%2C%20and%20safe%20housing%20and%20shall%20demonstrate%20acceptable%20workmanship%20reflecting%20journeyman%20quality%20of%20work%20of%20the%20various%20trades
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280#:~:text=The%20strength%20and%20rigidity%20of%20the%20component%20parts%20and/or%20the%20integrated%20structure%20shall%20be%20determined%20by%20engineering%20analysis%20or%20by%20suitable%20load%20tests%20to%20simulate%20the%20actual%20loads%20and%20conditions%20of%20application%20that%20occur
- Qualification is performed by a legislatively defined <u>Accreditation Body</u>. <u>ANSI National Accreditation Board (ANAB)</u> is the largest independent accreditation body in North America and provides services in more than 75 countries. <u>DrJ</u> is an ANAB accredited <u>product certification body</u>.
- ²⁶ See Code of Federal Regulations (CFR) <u>Title 24 Subtitle B Chapter XX Part 3280</u> for definition.
- 27 <u>2018 IFC Section 104.9</u>
- Approved is an adjective that modifies the noun after it. For example, Approved Agency means that the Agency is accepted officially as being suitable in a particular situation. This example conforms to IBC/IRC/IFC Section 201.4 where the building code authorizes sentences to have an ordinarily accepted meaning such as the context implies.
- 29 <u>https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1707.1</u>





- Multilateral approval is true for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- 31 http://www.drjengineering.org/AppendixC AND https://www.drjcertification.org/cornell-2016-protection-trade-secrets
- https://www.law.cornell.edu/uscode/text/18/1832#:~:text=imprisoned%20not%20more%20than%2010%20years
- https://www.law.comell.edu/uscode/text/18/1832#:~:text=Any%20organization%20that,has%20thereby%20avoided
- https://up.codes/viewer/wyoming/ibc-2021/chapter/17/special-inspections-and-tests#1706.2
- 35 IBC 2021, Section 1706.1 Conformance to Standards
- 36 IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General
- 37 See Section 11 for the distilled building code definition of **Approved**
- 38 Los Angeles Municipal Code, SEC. 98.0503. TESTING AGENCIES
- https://up.codes/viewer/california/ca-building-code-2022/chapter/17/special-inspections-and-tests#1707.1
- New York City, The Rules of the City of New York, § 101-07 Approved Agencies
- New York City, The Rules of the City of New York, § 101-07 Approved Agencies
- https://up.codes/viewer/new_jersey/ibc-2018/chapter/17/special-inspections-and-tests#1707.1
- 43 https://www.nj.gov/dca/divisions/codes/codreg/ucc.html
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3282/subpart-A/section-3282.14
- https://www.ecfr.gov/current/title-24/subtitle-B/chapter-XX/part-3280
- 46 IBC 2021, Section 1706 Design Strengths of Materials, 1706.2 New Materials. Adopted law pursuant to IBC model code language 1706.2.
- 47 IBC 2021, Section 1707 Alternative Test Procedure, 1707.1 General. Adopted law pursuant to IBC model code language 1707.1.
- 48 https://www.nspe.org/resources/issues-and-advocacy/professional-policies-and-position-statements/regulation-professional AND https://apassociation.org/list-of-engineering-boards-in-each-state-archive/
- 49 IBC 2021, Section 1706 Design Strengths of Materials, Section 1706.1 Conformance to Standards Adopted law pursuant to IBC model code language 1706.1.
- 50 https://iaf.nu/en/about-iaf-mla/#:~:text=it%20is%20required%20to%20recognise%20certificates%20and%20validation%20and%20verification%20statements%20issued%20by%20conformity%20assessmen t%20bodies%20accredited%20by%20all%20other%20signatories%20of%20the%20IAF%20MLA%2C%20with%20the%20appropriate%20scope
- ⁵¹ True for all ANAB accredited product evaluation agencies and all International Trade Agreements.
- 52 https://www.justice.gov/crt/deprivation-rights-under-color-law AND https://www.justice.gov/atr/mission