LANL Building Official

Listing of LBO-Approved
Fabricators • Testing, NDE, and Inspection Agencies • Products

August 19, 2026

This listing is published pursuant to the LANL Building Code Program defined by Chapter 16 of the LANL Engineering Standards Manual (ESM, here, also invoked by the Tailored Standards Manual), which implements the International Building Code and other codes. See that program for process and restrictions.

This document includes offsite fabricator and quality related agency (test and/or inspection) approvals comingled in Part A. Approved products, including concrete mixes, are addressed in Part B.

- For approved offsite structural fabricator in-shop work, presence in these listings is pursuant to IBC-2021 §1704.2.5, "Special inspection of fabricated items," and §1704.2.5.1, with such approval often given with conditions and, as discussed in the Part A Notes below, restrictions.
    - Certificates of compliance for the fabrication of structural, load-bearing, or lateral load-resisting members or assemblies on the premises per 1704.4 remain required; Attachment B of ESM Chapter 16, Section IBC-FAB is an acceptable template for the primary CoC.
- For approved quality agencies, presence in these listings is necessary for performance of code-related work for LANL or its contractors and subcontractors per IBC-2021 §1703 and the ESM.

Disclaimer: Listed providers and products have received LBO approval within the context herein. Such is not an endorsement beyond that approval, nor guarantee of future work or sales. Furthermore, listing does not imply that other products or providers will necessarily be unacceptable if submitted for approval; that depends upon subsequent LBO staff evaluation. Finally, listing herein does not negate any constructor or fabricator's responsibility to ensure that work is performed correctly.

Note on nuclear facility work: Presence of any firm or product on these listings does not also indicate evaluation or approval for use in nuclear-related work from a nuclear QA (qualified supplier) standpoint. For that use, items or services must also be either commercial-grade dedicated or the supplier listed on LANL's IQPA Division Institutional Evaluated Suppliers List (IESL; LANL internal) for such work.

Contacts

For questions, suggestions, or concerns regarding this listing, please contact POCs below (all area code 505):

Scope	ESM Ch. 16 Reference
Testing agencies (lab and field material testing)	Section IBC-TIA (ref. IBC §1703)
General and Special inspection agencies	Section IBC-TIA (ref. IBC §110 and §1703.1)
Where fabrication of structural, load-bearing or lateral load-resisting members or assemblies is being conducted on the premises of a fabricator's shop, special inspections of the fabricated items shall be performed during fabrication, except where the fabricator has been approved to perform work without special inspections in accordance with IBC Section 1704.2.5.1	Section IBC-FAB
POC: Timothy Donovan, Chief Building Inspector (LCBI), 500-2731, timd@lanl.gov **Alt:** Robert Abeyta, Construction Lead LBO, 412-1136, rkabeyta@lanl.gov	

Scope	ESM Reference
NDE (non-destructive examination) and/or welding inspection	Chapter 13 Welding, Joining, & NDE; LANL-internal database controls LANL inspector quals
POCs Welding: David Bingham, Welding Chief Inspector (664-0416), dbing@lanl.gov Alternate: Anthony Mecham, (695-4462), ammecham@lanl.gov NDE: David Harvey, Responsible Level III (695-3667), dpharvey@lanl.gov Alternate: David Bingham (above)	

Please submit updates to timd@lanl.gov and engstandards@lanl.gov

PART A – FABRICATOR AND QUALITY RELATED AGENCY APPROVALS

Notes for Summary Tables A1 and A2, and General Notes	
Note 1	"1" in Tables A1 or A2 indicates re-evaluation required prior to use.
Note 2	**Restrictions:** For structural fabricators, this term was introduced in August 2026. If fabricator is listed as Restricted in the summary tables or their detailed listing, constructor must contact LANL Chief Building Inspector (LCBI) in Contacts above for specific requirements before contracting for any fabrications (commonly, it is the need to use an LBO-approved testing and inspection agency for weld inspection, and/or quality program re-evaluation). To be considered for Unrestricted status (no need to contact LCBI), as a minimum, fabricator must have current ICC-IAS certification as applicable to scope of work (AC157, 172, or 472, links below) and submit certification to LCI for approval PRIOR to any fabrications. **SFRS or demand-critical welds**: For structural fabricators, regardless of unrestricted status or otherwise, when the work includes seismic load or seismic-force-resisting structures (SFRS) or demand-critical welds, they remain subject to project-specific LANL reviews and approvals for processes, procedures, qualifications and materials prior to start and may require shop inspections by LBO-approved inspectors prior to, during, or after fabrication (ref. IBC §1704.2.5, AISC).
Note 3	**Third-Party Inspection:** Refers to IBC General (Section 110) and/or Special inspections (IBC Ch. 17) where LANL must approve proposed inspectors, except as noted. Bote, some firms are approved for specialty areas only; e.g., fire, mechanical, TAB.
Note 4	**NDE:** CWI (weld) inspector approval is not per these listings but via ESM Ch 13 WIGN 6-01 and this internal LANL website database
Note 5	**Conditions:** Most firms listed are LBO-Approved with conditions in their approval notification letter, such as the necessity to contact LBO with key personnel changes or, for testing agencies, the discovery of uncalibrated lab equipment. **An additional condition, applicable to all firms in this document, is that the subcontracting of work by approved firms to lower-tier firms must be approved by the LBO POC listed above under Contacts.** Note, approval limitations (e.g., scope) are generally noted in the detailed listings below the summary tables, but not all approval conditions.
Note 6	**Revision schedule:** As this document is typically updated every few months, check with the Chief Inspector shown above regarding firms not listed as they may be under review or recently approved.

Summary Tables

Usage: See Notes above, plus the Detailed Listing that follows the Summary Tables for limitations/scope-of-approval and other details

Table A1 — New Mexico Presence Summary

Firm	Concrete Testing (C)	Masonry (M)	Metal ID Testing (ID)	NDE (NDE) (see Note 4)	Soil (S)	Geotech Testing (G)	Structural Steel Fab (SFU) Unrestricted (see Note 2)	Structural Steel Fab (SFR) Restricted (see Note 2)	Concrete Prefab (CP)	Third-Party Inspection (see Note 3)	Comments
505NDE (Corrales, etc.)				X							VT, PT, MT, UT

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Firm	Concrete Testing (C)	Masonry (M)	Metal ID Testing (ID)	NDE (NDE) (see Note 4)	Soil (S)	Geotech Testing (G)	Structural Steel Fab (SFU) Unrestricted (see Note 2)	Structural Steel Fab (SFR) Restricted (see Note 2)	Concrete Prefab (CP)	Third-Party Inspection (see Note 3)	Comments
Acuren (Farmington)				X							VT, PT, MT, RT, and UT
Albuquerque Vault									X		
Bauman Industrial Labs				1							ABQ office; VT, PT, MT, UT
BSN Santa Fe Enterprises Inc.	X				X	X					Santa Fe
Buildology Precast									X		ABQ Office
Clover Leaf Solutions						X				X	ABQ office
Concrete, Aggregate, and Asphalt Testing	X				X						Algodones, NM
Castillo Prestress Concrete									X		Belen, NM Office
Coreslab Structures									X		ABQ facility only; not concrete testing
Daniel B. Stephens & Associates						X					ABQ, within scope of AASHTO certifications
Dark Matter Fabrication								X			White Rock Special Inspection still required
Energy Balance & Integration, LLC										X	See Detailed Listing for specifics
GeoTek, Inc.	X	X			X	X				X	ABQ Office for testing, Nevada Office for Inspection
Integrated Quality Solutions										X	Los Alamos
LANL (e.g., Triad, LLC)	X		X	X	X		X				Fab at SM-38 only; all inspections (general and Special) by ES
NorthGES	X	X			X	X				X	ABQ office
NV5	X	X			X	X				X	ABQ office
Pace Metals, LLC								X			ABQ office
Premier NDT Services				1							Farmington
TEAM Industrial				X							Farmington; VT, PT, MT, RT, and UT
Terracon	X				X	X					ABQ office only
Western Technology	X				X	X				X	ABQ office only
WSP	X	X			X	X				X	ABQ office only

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Table A2 — Out-of-State Locations Summary

Usage: See Notes above Table A1, plus the Detailed Listing that follows the Summary Tables for limitations/scope-of-approval and other details

Firm	Concrete Testing (C)	Masonry (M)	Metal ID Testing (ID)	NDE (NDE) (Note 4)	Soil (S)	Geotech Testing (G)	Structural Steel Fab (SFU) Unrestricted (see Note 2)	Structural Steel Fab (SFR) Restricted (Note 2)	Concrete Prefab (CP)	Third-Party Inspection (Note 3)	Comments
Able Steel Fabricators, Inc.								X			Mesa AZ. Must use an LBO-approved testing and inspection agency for welding inspection.
Acuren (Denver, etc.)				X							VT, PT, MT, RT, and UT
Agate Steel, Inc.								X			Scottsdale, AZ
Anchor Fabrication								X			Wichita, KS (formerly JRCMP)
Apave America (nee IRIS)				X							Tulsa, OK. Was IRISNDT
Apollo Mechanical Contractors								X			Pasco, WA
Armag Corporation								X			Bardstown, KY
BlueScope Buildings NA							X				6 Locations
Bridge Brothers								X			Pickens, SC; aluminum pedestrian structures only
CANAM Steel Corp							X				Buckeye, AZ
CTL-Thompson Testing Agency, Denver	X										Only durability testing per ASTM C 666, prisms in water tank.
Cutting Edge Steel, Inc.								X			Dacono, CO
EZARC Building Solutions								X			Lindon, UT
Global Fire Protection Group										X	Chads Ford, PA (esp. firestopping)
IMR Metallurgical Services, Louisville KY			X								Full range of mechanical and chemical testing of metals
Independence Steel and Rigging								X			Pima, AZ
JR Custom Metal Products											see Anchor
KDM Steelworks								X			Loveland, CO
Kontek Industries, Inc.								X			Kannapolis, NC
Leak Testing Specialists				X							Orlando, FL
MISTRAS (Denver, etc.)				X							VT, PT, MT, RT, and UT
MMI Industrial and Steel								X			Mesa, AZ
MMI Tank and Industrial Services, Inc.								X			Phoenix, AZ
MODLOGIQ, Inc.								X			New Holland, PA

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Firm	Concrete Testing (C)	Masonry (M)	Metal ID Testing (ID)	NDE (NDE) (Note 4)	Soil (S)	Geotech Testing (G)	Structural Steel Fab (SFU) Unrestricted (see Note 2)	Structural Steel Fab (SFR) Restricted (Note 2)	Concrete Prefab (CP)	Third-Party Inspection (Note 3)	Comments
Next Level Steel / Next Level Steel West								X			Mesa and Goodyear, AZ
NUCOR–Building Systems							1				Utah facility
Premier Steel Services, LLC (Glenpool, OK (Tulsa area)								X			
RedGuard								X			Wichita, KS
Revolution Industrial								X			Chandler, AZ
Rigid Global Buildings							X				Houston, TX
SafeRack								X			Andrews, SC
Stork Testing and Metallurgical Consulting				1							Houston location/staff only: liquid penetrant, magnetic particle, and ultrasonic testing only
StructureCast									X		Bakersfield, CA
TEAM Industrial (Denver, etc.)				X							VT, PT, MT, RT, and UT
U.S. Chemical Storage								X			Wilkesboro, NC
Valley Joist, LLC							X				Limited to K, LH, DLH, and CJ series joists and joist girders.

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Background

Offsite Structural fabricator
Approval is governed by IBC-2021 §1704.2.5, "Special inspection of fabricated items," and §1704.2.5.1. That allowance is utilized by ESM Ch. 16, Section IBC-FAB.

- Steel – AISC Quality Certification Program for Steel Building Structures & Simple Steel Bridges
- Steel, Seismic – AISC 341

Testing and Inspection Agencies
Testing and Inspection Agency (TIA) approval is governed by IBC-2021 §1703 and ESM Ch. 16, Section IBC-TIA.
Typical TIA Accreditations:

- Concrete—ASTM C 1077
- CWI – AWS
- Masonry –ASTM C 1093
- NDE – ASNT
- Soils—ASTM D 3740
- Geotech – see heading and table below
- IAS – Special Inspection Agencies

Approval criteria and the process for becoming listed may be found in ESM Chapter 16 Section IBC-TIA and applicable national and industry standards as listed below.

Evaluations of testing agencies for approval by the LANL Building Official (LBO) generally model the associated national codes/standards identified in the LANL. These standards, such as ACI 301, ASTM E 329, and other ASTM standards generally require national accreditation for each company, each facility, and mobile units. Evaluations will be done by an LBO-approved chief inspector unless another evaluator is specifically approved by the LBO. The evaluation will focus on verification of national accreditation for the specific type of testing along with verification of key attributes such as, qualified personnel, calibrated devices, proper documentation processes (internally and externally). An example is that the Testing Agency must follow the applicable ASTM or other standard(s) used for specific tests including documenting on their reports any cases where they do not follow the specific test methods.

Geotechnical (Subsurface Investigations)
This work (e.g., seismicity, stratigraphy, ground water conditions, slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on soil-bearing capacity, compressibility, liquefaction, and expansiveness) shall be performed by an LBO-approved geotechnical firm with a history/expertise in subsurface evaluations and performed under the direct supervision of a qualified geotechnical engineer. In addition (based on the specific edition of the IBC imposed on the project), the registered design professional shall have a fully qualified representative on site during all boring and sampling operations. Subsurface firms must meet these minimum requirements whether they are also an approved testing agency; furthermore, an LBO-approved soil testing agency must be used for all analytical soil tests governed by lab accreditations (e.g., ASTM D 3740). Geotechnical work is governed by ESM Chapter 5, Section IV.

Field Method List
ASTM D2487 Standard Procedure for Classification of Soils for Engineering Purposes
ASTM D2488 Practice for Description and Identification of Soils (Visual-Manual Procedure)
ASTM G57 Standard Practice for Soil Resistivity Using the Wenner Four-Electrode Method
Laboratory Method List
ASTM D422 Standard Test Method for Particle-size Analysis of Soils
ASTM D1557 Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2216 Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D3740 Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM D3080 Test Method for Direct Shear of Test of Soils Under Consolidated Drained Conditions
ASTM D4318 Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils

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ASTM D4546 Test Methods for One-Dimensional Swell or Collapse of Soils
AASHTO T-193 Standard Method of Test for the California Bearing Ratio

Selected Relevant Standards (Current Editions)

- ISO/IEC 17025, General Requirements for the Competence of Testing and Calibration Laboratories
- AASHTO re:source (formerly AMRL) testing lab accreditation program
- ASTM E 329, *Standard Specification for Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction*
- ASTM E 543, *Standard Practice for Agencies Performing Nondestructive Testing*
- AWS (American Welding Society) QC-4 for welding qualification testing facilities

ICC-IAS Accreditation Criteria (click here for latest; links below may not be)

- AC89, Accreditation Criteria for Testing Laboratories
- AC157, Accreditation Criteria for Fabricator Inspection Programs for Reinforced and Precast/Prestressed Concrete
  - Required for LANL Unrestricted status; see Note above Summary Tables
- AC172, Accreditation Criteria for Fabricator Inspection Programs for Structural Steel
  - Required for LANL Unrestricted status; see Note above Summary Tables
- AC291, Accreditation Criteria for Special Inspection Agencies
- IAS/MB/004 AC472, Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems
  - Required for LANL Unrestricted status; see Note above Summary Tables
- National Ready Mixed Concrete Association (NRMCA)
- Precast Concrete Institute (PCI)
- Additional specific accreditation programs based on IBC or associated national standards such as ACI, AISC, and ASTM.

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DETAILED LISTING OF LBO-APPROVED FIRMS

505NDE, LLC
479 CAMINO SIN PASADA
CORRALES, NM 87048
505-342-1000
https://505nde.com

Approved for: magnetic particle (MT), liquid penetrant (PT), conventional ultrasonic (UT), and visual (VT) methods, all locations.

gerald.henderson@505NDE.com, 505-480-4827

Audit history: 6/23/2026 DPH; ES-DO-Memo-26-018, 2026-7-30

Able Steel Fabricators, Inc.
4150 E. QUARTZ CIRCLE
MESA, ARIZONA 85215
480-830-2253
https://ablesteel.com

General Inquiries: Mark Fultz mfultz@ablesteel.com

Approved for: Fabrication of metal buildings made of sheet steel and tubes by welding, cutting, and bending of metal. **Must use an LBO-approved testing and inspection agency for welding inspection. Restricted status, see Note above Summary Tables.**

Audit History: 08/15/23 RKA/DT; ES-DO 23-041
AISC cert C-00028201 - Building Fabricator, Complex Coating Endorsement 2 - Covered, exp. 01/31/2027; verified 4/2026 TMD

Acuren Industrial Services
2060 AFTON PL
FARMINGTON, NM 87401
505-326-6760

7281 E 54TH PLACE
COMMERCE CITY, CO 80022
303-307-4503

Nat'l: 800-218-7450
https://www.acuren.com/inspection/

Approved to perform: NDE methods: VT, PT, MT, RT, and UT at all company locations/field.
Audit history: DPH: (ES-DO: 22-021, 9/30/2022)

Operations Manager: Gunnar Netteberg, gunnar.netteberg@acuren.com

Agate Steel, Inc.
2377 N. COUNTRY CLUB DR.
SCOTTSDALE, AZ 85256
480-994-9455
https://agatesteel.com

Angel Martinez, Steel Operations Manager
angel.martinez@agatesteel.com

Approved for: Structural steel fabrication. **Restricted status, see Note above Summary Tables.**

Audit history: 04/07/2025 TMD; ES-DO-Memo-25- 017; AISC certification exp. 05/31/2025

Albuquerque Vault Co.
300 AIRPORT DRIVE NW
ALBUQUERQUE, NM 87121
505-836-4404
http://www.albuqvault.com

Mike Addy, Owner/President albuqvault@msn.com Chani Addy, QC manager

Approved for: concrete vaults, manholes, drop inlets

Audit history: Initial – ES-DO memo 24-011 (04/08/2024)
NPCA cert., exp. 12/31/2024 TMD 03/26/2024

Anchor Fabrication
(previously JR Custom Metal Products, Inc.)
2237 S. WEST ST CT
WICHITA, KS 67213
316-263-1318
https://www.anchorfabrication.com/

Approved to perform: Steel fabrication. **Restricted status, see Note above Summary Tables.**

Gary D. Richards, General Manager,
GRichards@JRCMP.com, c 316-650-2685

Audit History: KK/DB: 2017-6-6 LBO ES-DO: 17-018 6/16/17. No AISC 6/2017 TO.

JRCMP was purchased by Anchor in July 2023. Anchor is a mass production fabricator. They also support structural fabrication for RedGuard and are listed due to that association and not necessarily for other capabilities.

Apave America (was IRIS NDT)
1115 WEST 41ST ST
TULSA, OK 74107
918-446-8773
usinfo@irisndt.com
www.irisndt.com/us/

Approved to perform: NDE using VT, RT, PT, MT, and conventional UT NDT methods in the field and fab shops.

Mr. Jimmy Melton, Location Manager, jimmy.melton@irisndt.com

Mr. Kevin Wilson, US QA Manager Level III, kevin.wilson@irisndt.com
918-446-8773 (o) 918-607-6800 (m)

Audit history: DPH 6/23/2026, approved ES-DO-Memo-26-019, 7/30/2026 (RT approved by ES-DO 20-052)

Apollo Mechanical Contractors
3404 N. SWALLOW AVE
PASCO, WA 99301
509-586-1104
www.apollomech.com

Approved to perform: Steel fabrication. **Restricted status** (see Note above Summary Tables)

Jim Jarrett, Operations Manager
Jim.jarrett@apollomech.com

Audit history: Initial - LBO (ES-DO 24-020 05/16/2024)

Armag Corporation
300 ARMAG AVE
BARDSTOWN, KY 40004
877-510-0087
https://www.armagcorp.com/

Approved to Perform: Steel Fabrication. **Restricted status** (see Note above Summary Tables)

info@armagcorp.com

Mr. Brandon Fryman, 859-534-3174
brandon.fryman@armagcorp.com

Audit history: 2008; MF/BD/DB spring 2023; ES-DO-Memo-23-035, 6/12/2023

Bauman Industrial Labs, LLC
813 PASEO DEL RIO PLACE SW ALBUQUERQUE, NM 87105
505-250-6328
https://www.baumanindustrial.com/

Patrick Bauman pat@baumanindustrial.com
Paul Bauman pablo60z@yahoo.com

Approved to perform: Structural steel weld inspections and NDE using VT, PT, MT, and UT NDT methods in the field (construction sites) and in fabrication shops.

Audit history: 9/15/20 DH/KB; ES-DO 20-061

BlueScope Buildings North America, Inc.
7440 DOE AVE
VISALIA, CA 93291
559-651-5325
http://www.bluescopebuildings.com/

Approved to perform: Steel fabrication and metal buildings. **Unrestricted status** (see Note above Summary Tables) contingent upon IAS AC472 certificate (exp. 04/01/2027; TD 8/11/26)

Susan Stark, President susan.stark@bsbna.com

Roger Flores, Quality Manager roger.flores@bsbna.com

Audit History: EL/DB: 2017-5-23 LBO ES-DO: 17-021 6/27/17.

Bridge Brothers
225 PUMPKINTOWN HIGHWAY
BUILDING 19
PICKENS, SC 29617
866-806-0847
https://bridgebrothers.com/

Approved to perform: aluminum pedestrian structure fabrications as well as steel fabrications. **Restricted status** (see Note above Summary Tables)

Conner Thompson, project manager
cthompson@bridgebrothers.com

Aaron Gentilucci, Sales
agentilucci@bridgebrothers.com

Audit history: LBO: 5/29/19 DB (ES-DO-19-014) AISC certs Bridge Fabricator Intermediate, Bridge Fabricator - Intermediate, Complex Coating Endorsement 1 - Enclosed, Fracture Control Endorsement - verified 04/28/2026 TMD

BSN Santa Fe Enterprises, Inc.
28 BISBEE COURT, SUITE B-10
SANTA FE, NM 87508
505-473-7973
https://bsnsantafe.godaddysites.com

Approved to perform: concrete and soils testing; geotechnical investigations

Jeffrey Romanowski, P.E., jeffrey@bsnsantafe.com

Audit history: Initial 12/23/2024 RKA (ES-DO memo 24-041)

Buildology Precast
3601 PAN AMERICAN FRWY NE
ALBUQUERQUE, NM 87107
505-344-6626
www.buildologyinc.com

Steve Hooper steve@buildology.com
Jonathan Eggleston jonathan@buildology.com

Approved to fabricate: Concrete retaining wall, Redi-Rock retaining walls (segmental precast), Anchor Diamond retaining walls (segmental dry cast retaining wall), cinder block non-prestressed, precast concrete, miscellaneous precast products, median/jersey barrier, parking bumpers, splash block, architectural precast concrete.

Audit history: Initial (ES-DO memo 23-051); verified NPCA cert. 03/26/2024 – TMD

CANAM Steel Corp (CSC)
22253 West Southern Avenue
Buckeye, AZ 85326
623-386-1900
https://cscsteelusa.com/

Mr. Gustavo Morales, Regional Sales Manager
Marc Reid, marc.reid@cscsteelusa.com, 480-639-8788

Approved to fabricate: steel decking and K, LH, DLH, and CJ series joists and joist girders. **Unrestricted status** (see Note above Summary Tables) contingent on ICC-IAS Fabricator Inspection Program AC172 (FA-465, certification exp. 06/01/2027 verified 8/11/26 TMD).

Audit history: Initial (ES-DO memo 26-014)

Castillo Prestress Concrete
1 LOPEZ LOOP
BELEN, NM 87002
505-864-0238
http://www.castilloprestress.com/

Certification Category: B4, C4
Approved to fabricate: box beams/slabs, double tees, I-beams/girders, piles, sound walls, stadium seats, structural wall panels

Audit history – Initial (ES-DO memo 23-050); PCI cert. verified - 08/17/2024 – TD

Clover Leaf Solutions, Inc.
5600 WYOMING BLVD.NE, SUITE 270
ALBUQUERQUE, NM 87109
505-998-9611

https://cloversolutions.us/construction- management/

Approved to perform: geotech; general and special inspection independent of constructor; LANL must approve inspectors and subtiers beyond Geo-Test and Wilson & Co.

Matt Custer, President, CEO, MGMT@cloversolutions.us

Corey Englebrake, COO 505-200-0057

Approval history: Insp: ES-DO-Memo-22-028 (12/22/22); geotech: 21-020 (3/30/21)

Concrete, Aggregate, and Asphalt Testing, LLC (CA2 Testing)
17 CENTRO
ALGODONES, NM 87001
505-718-3030 fax: 505-425-9159
www.ca2testing.net

Approved to perform: Concrete (including durability) testing; soils testing but not T88, T96, C131, D422.

Owner/Eng Manager: Lee Ann Marquez, PE,
leaann@ca2testing.com
Accreditation Information: Javier Ramirez
javier@ca2testing.com

Audit history: LBO: 10/18/2011 JLR (ES-DO: 12- 001)
Certifications last verified: AASHTO – 10/17/2023 – TD

CoreSlab Structures (Albuquerque), Inc.
2800 SECOND STREET SW
PO BOX 1609
ALBUQUERQUE, NM 87102
505-247-3725 fax: 505-243-4875
https://www.coreslab.com/locations/albuquerque- new-mexico/

Approved to perform: Precast concrete fabrication, not concrete testing, at ABQ facility.

salesalbuquerque@coreslab.com

Greg Krause, Gen. Mgr, gkrause@coreslab.com

Matthew Manning, QC Mgr,
mmanning@coreslab.com

Joseph Lujan, QC Supervisor,
jlujan@coreslab.com

David Baird, Project Mgr, dbaird@coreslab.com

Audit History: LBO 12/12/19 (SRG) (ES-DO: 20-014, 1/6/2020) PCI certs. (AC, B4, and C4) verified 03/26/2024 - TMD

CTL | Thompson
1971 W 12TH AVE
DENVER CO, 80204
303-825-0777 fax: 303-825-4252
http://www.ctlthomspon.com/

Approved to perform: concrete durability testing per ASTM C 666 only, Denver office only

Eng Manager: Damon Thomas, PE
dthomas@ctlthompson.com

Audit history: LBO 4/8/2011 JLR (ES-DO 11-018)
Certifications last verified: 10-17-2023 – TD

Cutting Edge Steel, Inc.
101 MILLER DR
DACONO, CO 80514
720-460-3560
www.cesteel.com www.cesmanufacturing.com

Approved to perform: Structural metal fabrications. **Restricted status, see Note above Summary Tables.**

Andy Weaver, VP of Preconstruction,
andyw@cesteel.com
Dave Vanderbeek, davev@cesteel.com

Audit History: Initial – LBO 09/15/2025 (ES-DO memo 25-037) ISO 9001:2015 cert. exp 02/02/2027 05/05/2026

Daniel B. Stephens & Associates, Inc. (DBS&A) Soil Testing Lab
4400 ALAMEDA BLVD. NE, SUITE C ALBUQUERQUE, NM 87113
505-889-7752 fax: 889-0258
http://www.dbstephens.com/
http://www.dbsa-soil-lab.com/

Approved to perform: Geotech testing within scope of AASHTO re:source certifications

Joleen Hines, Laboratory Ops Manager,
jhines@dbstephens.com

Audit history: LBO: 4/6/2015 RT (ES-DO: 15-018, 4/7/15). Certs last verified:10/17/2023 – TD

Dark Matter Fabrication
121 MONTE VISTA ST
WHITE ROCK, NM 87547
505-629-9363
https://darkmatterfabrication.com/

Approved to perform: Structural metal fabrications. Must use a LANL Building Official approved testing and inspection agency when performing welding inspection operations. IBC Ch 17 Special Inspection by a LANL LBO-Approved Agency is required. **Restricted status** (see Note above Summary Tables)

cole@darkmatterfabrication.com

Approval history: LBO: 6/2026 TMD (ES-DO: 26-017, 7/7/26

Energy Balance & Integration, LLC. (EB&I)
4804 HAWKINS ST NE
ALBUQUERQUE, NM 87109
505-344-7979
https://www.ebinm.com/

Approved to perform: third party tests/inspections under the NEBB, TABB, ICB, SMACNA national code provisions. Included are testing adjusting and balancing of HVAC systems (specialty, industrial, commercial), fire, life safety, HVAC, mechanical testing, duct air leakage testing, room and building envelope testing.

Anthony Kocurek, Owner, 505-344-7979 ext 101**,** tkocurek@ebinm.com

Approval history: initial – ES-DO-Memo-24-037 (12/3/24)

EZARC Building Solutions
21172 700 N
LINDON, UT 84042
385-335-8931
https://ezarcsolutions.com/

Approved to perform fabrication of structural steel, metal component manufacturing, and miscellaneous steel members made of sheet steel and tubes by welding, cutting, and bending of metal (prefabricated buildings), **Restricted status** (see Note above Summary Tables)

Julie Peck, Vice President, jpeck@ezarcsolutions.com, 480-369-2627

Audit history - AISC cert - Building Fabricator, exp. 08/31/2024 – RKA/TD

GeoTek, Inc.
2100 AZTEC ROAD NE
ALBUQUERQUE, NM 87107
505-456-4900 office
www.geotekusa.com

Approved to perform: Concrete (field and laboratory), soils (field and laboratory), masonry, asphalt, and aggregate testing; geotech services; visual examination, general and special inspection independent of constructor; LANL must approve inspectors and firms.

Alex S. Koehler, P.E. - Branch Manager akoehler@geotekusa.com

Audit history: AASHTO certs (ABQ)- 11/01/2023 TD IAS Special Inspection Agency cert (Nevada)- exp. 11/01/2024 -TD

Global Fire Protection Group
225 WILMINGTON WEST CHESTER PIKE
STE 246
CHADDS FORD, PA 19317
855-456-2250
https://www.globalfpg.com/

https://www.globalfpg.com/fire-protection-engineering-services#ThirdPartyInspectionServices

Approved to perform: Third-party inspections (e.g., firestopping, ASTM 2174 – Through Penetrations; ASTM 2393 – Fire Rated Joints & Perimeter Fire Barrier)

Mr. Pat Tesche, Field Operations Manager, ptesche@globalfpg.com

Approval history: ES-DO-Memo-21-010 (2/19/21)

IMR Metallurgical Services - Louisville
4510 ROBARDS LN
LOUISVILLE KY 40218
502-810-9007 fax: 502-810-0380
http://www.imrtest.com/index_louisville.html

Approved to perform: Full range of metallurgical testing per ASTM F606, etc.

Lab Director: Jennifer Breetz
Jennifer.Breetz@imrtest.com

Quality Manager: Jason Sponel
Jason.sponel@imrtest.com

Technical Director/Failure Analysis: Brett A. Miller, P.E., FASM Brett.Miller@imrtest.com

Metallurgy Supervisor: Phillip Swartzentruber, Ph.D., PE
phillip.swartzentruber@imrtest.com

Audit history: CMRR-S-11-036 5/25-24/11 DLT; LBO 6/8/2011 JLR (ES-DO 11-020) Accreditations listing here.

Integrated Quality Solutions, LLC
894 43RD STREET
LOS ALAMOS, NM 87544
970-274-8993

www.iqsolutionsco.com

Zachariah Bergstrom zbergstrom@iqsolutionsco.com

Approved to perform: general and special inspection independent of constructor; LANL must approve inspectors and subtiers

Audit history: Initial – LBO 04/29/2024 (ES-DO memo 24-019)

Independence Steel & Rigging, LLC
PO BOX 738
PIMA, AZ 85543-0738
(near Safford, AZ)
(928) 651-1698
Saffordsteelfabrication@gmail.com

Approved for: Structural steel fabrication. **Restricted status** (see Note above Summary Tables)

Owner/Dir. Of Ops: Nick DeRusha

JR Custom Metal Products Inc.
see Anchor Fabrication

KDM Steelworks
170 2ND STREET SW UNIT B
LOVELAND, CO 80537
720-975-5110

https://www.kdmsteelworks.com/info@kdmsteelworks.com

Approved to Perform: Structural metal fabrications. **Restricted status** (see Note above Summary Tables)

Ms. Marj Oliver, Lead Estimator,
bids@kdmsteelworks.com

O: 970-663-4000, C: 720-987-7176

Audit History: MF/DB 2023-4; ES-DO-Memo-23-036, AISC Building Fabricator exp. 12/31/2026 TD 04/30/2026

Kontek Industries Inc.
805 MCCOMBS AVE
KANNAPOLIS, NC 28083
980-321-7273
www.kontekindustries.com

Approved to perform: Structural metal fabrications. **Restricted status** (see Note above Summary Tables)

Alexander Baird, Dir of Ops,
alec.baird@kontekindustries.com

Audit History: Initial – LBO 2/18/2025 (ES-DO 25-008). ES-DO 26-006 added SteelCraft Technologies, Grand Rapids, as approved sub.

LANL
PO 1663
LOS ALAMOS NM 87545
http://www.lanl.gov/

Approved to perform: concrete, soils, metals ID, NDE, all inspections, steel fabrication (SM-38 only). **Unrestricted status** (see Note above Summary Tables)

Eng Manager/LBO: Robert Abeyta, ES-DO, 606-0600

QA Contact: Dawn Cunningham, IQPA-QSS

Material Test Lab (MTL) Supervising ACI Level 2/ Engr: Santi Scheer Salazar

Audit history: SM-38: MAM: QPA-DO-18- 013/AR(17)-017.001 Appv. 8/20/18 (ES-DO-18-023).

Certifications last verified: AASHTO 10/17/2023 – TD

Leak Testing Specialists
5810 HOFFNER AVE, STE 805
ORLANDO, FL 32822
407-737-6415
https://leaktestingspecialists.com/

Approved to perform: NDE leak testing (LT) method.

Kaylie Page, Quality Manager for LTS
Kaylie.Page@leaktestingspec.com

Audit history: 9/29/2022 DPH (ES-DO-Memo-23- 026, 5/1/2023)

MISTRAS
4117 S. VALLEY DRIVE UNIT 100
LONGMONT, CO 80504
970-535-4766, fax 970-535-4151
https://www.mistrasgroup.com/company/branches/denver-co-usa/

Approved to perform: NDE methods: VT, PT, MT, RT, and UT at all company locations.

Quality Manager: Mr. Osman Murtic,
osman.murtic@mistrasgroup.com

Gen. Mgr: Manuel Posada,
manuel.posada@mistrasgroup.com

Audit history: DPH: (ES-DO: 22-022, 9/30/2022)

MMI Industrial and Steel
2045 S VINEYARD STE. 118
MESA, AZ 85210
480-964-9041
http://www.mmiindustrial.com/

Approved to perform: Steel fabrication. **Restricted status** (see Note above Summary Tables)

Brett Huston, CFO brett@mmiindustrial.com

Danielle Medina, QC manager, danielle@mmiindustrial.com

Jason Barnes, Senior Director, jason@mmiindustrial.com

Audit history: Initial – ES-DO memo 24-009 02/17/2024. AISC Building Fabricator exp. 04/30/2027 TMD

MMI Tank and Industrial Services, Inc.
3240 S 37TH AVE
PHOENIX AZ 85009
602-272-6000
http://www.mmitank.com/

Approved to perform: Steel fabrication. **Restricted status** (see Note above Summary Tables)

Mr. Stacy Pinckard, President, Stacy@MMItank.com

Audit history: Initial: PB 6/11/15 (ES-DO: ES-DO- 15-026, 7/9/2015). No AISC 6/2017 TO. Verified info 10/23/2023 – TD

MODLOGIQ, Inc.
191 QUALITY CIRCLE
NEW HOLLAND, PA 17557
717-354-7770
https://www.modlogiq.com/

Approved to perform: fabrication of modular buildings, using LANL-approved welding inspection agency. **Restricted status** (see Note above Summary Tables)

Joseph Dattoli, VP of Construction Services
josephdattoli@modlogiq.com
717-354-7770

Audit history: Initial 04/22/2025 (ES-DO-Memo-25-022)

Next Level Steel / Next Level Steel West
522 W. MCKELLIPS RD
MESA, AZ 85201
480-733-1600

15836 WEST EDDIE ALBERT WAY
GOODYEAR, AZ 85338
602-805-2200
http://www.Nextlevelsteel.com

Approved to perform: steel fabrication. **Restricted status** (see Note above Summary Tables)

Brandon Bell, Brandon@nextlevelsteel.com, M: 480-223-3301

Audit history: Initial – ES-DO-Memo-24-031
AISC Building Fabricator (both locations)
exp.03/31/2027 TMD 04/29/2026

North GeoEngineering Services LLC (NorthGES)
4915 CUMBRE DEL SUR COURT NE
ALBUQUERQUE, NM 87111
M: 505-400-2919 O: 505-298-3177
https://northges.jimdoweb.com/

Approved to perform: Concrete (field and laboratory), soils (field and laboratory), masonry, asphalt, and aggregate testing; geotech services; general and special inspection independent of constructor; LANL must approve inspectors and firms.

John North, VP, john.northges@gmail.com

Approval history: ES-DO-Memo-22-011 (inspection, VT) 8/8/2022; 23-006 (test/geo) 2/17/2023

NUCOR Building Systems–Utah, LLC
P.O. BOX 907
1050 N. WATERY LANE
BRIGHAM CITY, UT 84302
435-919-3100 fax: 435-919-3101
http://www.nucorbuildingsgroup.com/

Approved to perform: fabrication of metal buildings made of sheet steel and tubes by welding, cutting, and bending of metal. **Unrestricted status** (see Note above Summary Tables) contingent upon IAS AC472 MB-107 cert. (exp 07/01/2027; TMD 8/11/26)

Mr. Mark VanDyken, General Manager
Mr. Dana Christensen, Certifications & Standards Coordinator, dana.christensen@nbsut.com, 435-919-3252

Audit history: Partial by DB 11/2016 (ES-DO: 17- 004)

NV5
4725 LUMBER AVE NE
UNITS 1 and 2
ALBUQUERQUE, NM 87109
505-344-7373 fax: 505-344-1711
http://www.nv5.com/

Approved to perform: concrete (field and laboratory), soils (field and laboratory), masonry, asphalt, and aggregate testing, and geotech services, at ABQ office. General and Special inspection independent of constructor; LANL must approve inspectors.

Engineer in Responsible Charge: Hisham Nofal, Hisham.nofal@nv5.com, 949-395-6520

Spec. Inspection / Field/Lab Testing Supervisor: Geoffrey Juskiewicz geoffrey.juskiewicz@nv5.com c505-235-6931

Operations Manager: Shafiq Popalzai, P.E. shafiq.popalzai@nv5.com C: 949-468-6644

Quality Manager: Carl Henderson, PhD, PE, GE Carl.Henderson@nv5.com C: 412-498-0670

Audit history: Testing: ES-DO-Memo-21-014 (3/22/21); Insp: ES-DO-Memo-21-005 (2/18/21).

Certifications: IAS SIA-390 (Type A) valid thru August 1, 2026. Last verified: 3/1/26 THO

Pace Metals, LLC
511 JAMES ALLEN PLACE SE
ALBUQUERQUE, NM 87105
505-873-2611
https://pacemetals.com/

Approved for: Structural steel fabrication. **Restricted status** (see Note above Summary Tables)

Tony Rooyakkers – owner/estimator
Tony.r@pacemetals.com

Audit history: Initial ES-DO-25-016 (03/31/25) RKA
AISC certification verified – 03/31/2025 RKA

Premier NDT Services, Inc.
2198 BLOOMFIELD HWY
FARMINGTON, NM 87401
505-325-1407
www.premierndt.com/

Approved to perform: NDE methods: Radiography, liquid penetrant, ultrasonic, magnetic particle, visual, and AWS-CWI. **Requires re-evaluation prior to use.**

Contact: Cody Nygern, VP Operations

Audit history: Initial: DAB/KB (ES-DO: 12-041, 8/27/2012)

Premier Steel Services, LLC
16420 S HIGHWAY 75
GLENPOOL, OK 74033
918-227-0110; fax: 918-227-0113
premiersteelservices.com

Approved to perform: Steel fabrication. **Restricted status** (see Note above Summary Tables)

Eng Manager Andy L. Vanaman, President, avanaman@premiersteelservices.com

QA Contact: Rick Humphreys, rhumphreys@premiersteelservices.com

Audit history: LBO: 5/2019 (ES-DO: 19-011); Certifications last verified: AISC BU current 08/17/2024 TMD. Work history: RLUOB, DARHT W.E.

RedGuard, LLC
401 W 47th ST SOUTH
WICHITA, KS 67217
316-440-5830 www.coversix.com

Approved to perform: Steel fabrication. **Restricted status** (see Note above Summary Tables)

Steve Petz, Sr. VP of Sales and Operations
stevep@redguard.com (316) 440-1833

Randy Tiersort, Business Development
randyt@coversix.com, ph. 316-867-8074

Christian Phillips, Project Eng. Manager
christianp@redguard.com

Ross Draney, General Manager rossd@coversix.com
M: 316-650-9026

Audit History: KK: 2017-6-9 LBO ES-DO: 17-019 6/16/17).
ISO 9001:2015 exp. 05/27/2025 – TD

Revolution Industrial
5858 W. RIGGS ROAD
CHANDLER, AZ 85226
480-993-6699
info@revolutionindustrial.com

Approved to perform: steel fabrication. **Restricted status** (see Note above Summary Tables)

Andre Mischel, QC Manager, 480-622-5365
Andre@revolutionindustrial.com

Jon Snell, 480-215-0664
Jon@revolutionindustrial.com

Audit history: LBO: 04/2024 (ES-DO: 24-010) AISC cert. fabricator verified 08/17/2024 - TMD

Rigid Global Buildings
18933 ALDINE WESTFIELD RD
HOUSTON, TX 77073
281-443-9065; 888-467-4443
https://www.rigidbuilding.com/

Approved to perform: Steel fabrication. **Unrestricted status** (see Note above Summary Tables) contingent upon IAS AC 472 MB-221 cert. (exp. 07/01/2027; TMD 8/11/26).

Carlito Dayag, P.E. – V.P. of Eng.,
CarlitoD@RigidBuilding.com

Audit History: TMD/DAB 2018-8-28; LBO: 4/26/21 (ES-DO-Memo-21-027). AISC Building Fabricator certs verified exp. 06/30/2027; Clark Co. approved fabricator exp. 10/04/2026 TMD

SafeRack
219 SAFETY AVE.
ANDREWS, SC 29510
843-894-2372
www.saferack.com

Approved for: Truck and railcar loading platform systems, maintenance work platforms, rolling platforms and related safety and fall protection products. **Restricted status** (see Note above Summary Tables)

Audit History: ISO 9001:2015 exp. 05/10/2025 – TD

StructureCast
8261 MCCUTCHEN ROAD
BAKERSFIELD, CA 93311
661-833-4490
www.structurecast.com

Approved to perform: Precast concrete construction including plate welding, cutting, and bending of metal. **Restricted status (see Note above Summary Tables)**

Mr. Brian Foley, brian@structurecast.com

Audit history: LBO: 03/2/2026 RKA/TMD (ES-DO: 26-011)

TEAM Industrial Services
700 DEKALB ROAD
FARMINGTON, NM 87401
505-599-4115

5095 PARIS STREET
DENVER, CO 80239

US: 800-662-8326
https://www.teaminc.com/service-solutions/inspection/

Approved to perform: NDE methods: VT, PT, MT, RT, and UT at all company locations/field.

Operations Manager: Brody Deleon,
Brody.Deleon@teaminc.com

Audit history: DPH: (ES-DO: 22-020, 9/30/2022)

Terracon
6805 ACADEMY PKWY WEST NE
ALBUQUERQUE, NM 87109
Office: 505-222-5778 Fax: 505-797-4287
www.terracon.com

Approved to perform: concrete, soils geotech testing, ABQ office only. Not T245, D692 (asphalt)

Dept. Manager: Raul E. Mendoza
Raul.Mendoza@Terracon.com

Principal/Geotechnical Dept. Mgr: Michael E. Anderson, PE (NM 12132), meanderson@terracon.com

Audit history: LBO: 9/6/13 JLR 9/9 em; certifications last verified: 3/25/20 MNO

Valley Joist, LLC
255 LOGAN LN
FERNLEY, NV 89408
775-575-7337
www.valleyjoist.com

Approved to perform: Steel fabrication, limited to manufacture of K, LH, DLH, and CJ series joists and joist girders. **Unrestricted status** (see Note above Summary Tables) contingent upon IAS AC172 cert (exp 03/01/2027, TMD 8/11/26)

west@valleyjoist.com

Mr. Keith Juedemann, General Manager
KJuedemann@valleyjoist.com C: 240-215-7011

Mr. Richard Leyva, Quality Control Manager
Audit History: ES-DO-22-015 (8/25/2022)

U.S. Chemical Storage
1806 RIVER ROAD, HWY. 268 WEST
WILKESBORO, NC 28697
336-990-0601
http://uschemicalstorage.com

Approved to perform: Steel fabrication of metal structures of sheet and tubes. **Restricted status** (see Note above Summary Tables)

Mr. Alex Roten, Quality Engineer
ARoten@uschemicalstorage.com

Audit history: July 2023 MF/BD; ES-DO-Memo-23- 039, 7/18/2023

Western Technologies, Inc. 8305
WASHINGTON PL NE
ALBUQUERQUE, NM 87113
505-823-4488 fax 505-821-2963
www.wt-us.com

Approved to perform: General and Special inspection independent of constructor; LANL must approve inspectors. Concrete, soils, geotech testing. ABQ office only.

Eng Manager: Parveez Anwar, PE (NM #10834) panwar@rma-western.com

QA Contact: Andrew Cuaderes, Sr. VP/Dir.
acuaderes@rma-western.com

Lab Supervisor: James Dacy (NICET Level IV)
jdacy@rma-western.com

Audit history: NDE removed 2024-11. Test: 9/6/13 JLR 9/9 em; Insp: ES-DO-20-030 3/24/20. Non-NDE certs last verified: 3/25/20 MNO

WSP (formerly Wood)
4221 BALLOON PARK RD NE
ALBUQUERQUE, NM 87109
505-821-1801 or 505-881-5357
https://www.wsp.com

https://www.wsp.com/en-us/who-we-are/our-offices/albuquerque-louisiana-blvd

Approved for (ABQ office only): concrete and soils (field and laboratory), masonry, asphalt, and aggregate testing; geotech; and third-party inspection (general and Special inspection; LANL must approve inspectors).

Hugo Carreon, Materials Service Practice Line Lead hugo.carreon@wsp.com , 505-456-0083, m 505-288-9804

Dan Kwiecinski, P.E., VP, Eng Manager
dan.kwiecinski@wsp.com

Eric Pease, Ph. D., P.E., Geotechnical Practice Lead eric.pease@wsp.com

Jeffrey Mann, P.E., consultant
jeffrey.mann2@wsp.com

Lucas Giron, P.E., lucas.giron@wsp.com

Jesse Boam, P.E., Lab Supervisor,
Jesse.boam@wsp.com

Approval history: LBO: Test/Geo: ES-DO-Memo-23-011.Insp: ES-DO-Memo 21-007 (2/18/21); 21-018 (3/29/21); prev. IQPA-DO:19-108, ES-DO-19-015 (7/24/19). 9/6/13 JLR 9/9 em. Certifications last verified: 3/25/20 MNO. Wood became WSP 9/2022.

PART B – LBO-APPROVED PRODUCTS

Part B includes:

1. Specified Product Approvals
2. Concrete Pre-Approved Mixes
3. Other Proprietary Products

1. Specified Product Approvals

Products named in the LANL Engineering Standards (i.e., ESM, Tailored Standards Manual, Master Specifications, Standard Details) are LBO-approved for use in the context of their listing there.

2. Concrete Pre-Approved Mixes[1]

Given the limited number of nearby concrete suppliers, LANL allows use of known "Standard" and pre-approved mixtures (mixes) without normally requiring or reviewing a plethora of repetitive, code-required, pre-pour submittals such as mixture proportions, characteristics, and strength data; constituent, truck, and plant certifications; supplier's quality control plan, and other submittals (the engineer of record may still require them, however).

When such pre-approved mixes are used, all batch-specific submittals are still required.

> Note, the submittal reduction approach above does not limit the potential for use of new mix designs. LANL Specification Section 03 3001 – *Reinforced Concrete* Part 2's Article "Concrete Mix Design*"* (as well as Section 03 3053 – *Miscellaneous Cast-in-Place Concrete)* allows for use of alternate mix designs other than these "Standard" mixes given acceptability of the code-required submittals listed therein.

Inclusion of concrete mixes in Table B1 below indicates that:

1. The concrete mix meets LANL Master Specification requirements. As of date of issue of the listing, it implies that:
   a. For Section 03 3001 (R19 and later) *Reinforced Concrete*, mixes comply with Article *Concrete Mix*.
   b. For Section 03 3053 (R11 and later) *Miscellaneous Cast-in-Place Concrete*, mixes comply with Article *Concrete Mix*.
2. The supplier's QA program and/or any compensatory actions are satisfactory. As a result, the supplier is not required to submit their QA program with each job.

Table B1 below summarizes the pre-approved mixes from the various concrete suppliers. The mix design details, certifications, and QA plans are available from the suppliers (and, for LANL internal, by clicking here).

[1] Section 2 on concrete jointly maintained by the LANL Engineering Standards Structural POC (internal) and the Building Code Program Chief Inspector shown in Contacts (e.g., p2 herein)

Concrete Suppliers

Duke City Redi Mix (DCRM), Santa Fe Skyler Stapleton, 505-877-5777 skyler@dukecityredimix.com Dean Rusk, QC Lab Mgr, 505-259-9882 drusk@dukecityredimix.com	Los Alamos Transit Mix (LATM) Lonnie Trujillo, 505-662-4214 ltrujillo@espmerc.com info@losalamostransit.com

Table B1. Summary of Pre-approved Standard Mix Designs[1]

	Spec Section[2] Concrete Mix Usage		Supplier[3] Concrete Mix IDs	
LANL MIX TYPE	**03 3001**	**03 3053**	**DCRM**	**LATM[4]**
Exterior				
4000 psi		X		4K, 4KX, 4K+ (CA2T C22-149) 4K1P, 4KX1P, 4K+1P (CA2T C24-038)
4500 psi	X		453420AEA	4.5K, 4.5KX, 4.5K+ (CA2T C22-149) 4.5K1P, 4.5KX1P, 4.5K+1P (CA2T C24-039)
5000 psi	X		503420AEA	5K, 5KX, 5K+ (CA2T C22-149) 5K1P, 5KX1P, 5K+1P (CA2T C24-039)
Interior				
4000 psi	X	X	403420	4KI (CA2T C22-150), 4KX, 4K+ (CA2T C22-149)
NMDOT (Civil)				
Class A		X		Class A (CA2T 2200-0477)
Class AA		X		Class AA (CA2T 2200-0476)
Class F		X		Class F (CA2T 2200-0488)

Notes:

[1] Adjustments to concrete mixture proportions to accommodate changes in project conditions are acceptable, provided the adjusted mixture complies with the Subcontract Documents, no changes are made to the concrete materials, and the revised mixture design is submitted for review by LANL.

[2] LANL Master Specification Sections: 03 3001 *Reinforced Concrete;* 03 3053 *Miscellaneous Cast-in-Place Concrete*

[3] Suppliers: DCRM: Duke City Ready Mix (Santa Fe); LATM: Los Alamos Transit Mix

[4] For LATM, K+ mixes are cold weather mixes and contain accelerator admixtures, KX (X = eXtended) mixes are hot weather mixes that contain retarders and have increased rotation time, and K mixes are basic mixes for the stated f'_c without any special admixtures

3. Other Proprietary Products

LBO approval approach is per ESM Ch. 16, Section IBC-GEN, which in Rev. 12, 3/22/2023 said:

6.0 Qualification (of) Manufactured Products for IBC Structural and Other Work

NOTE: Qualification here refers to IBC matters, not nuclear ones.

2.1 Under 104.9, 104.11, and the Special Cases section of the IBC (1705.1.1), proprietary products must be approved by the LBO. Structural examples are anchor channels, mechanical reinforcing steel splices/couplers, and post-installed (PI) anchors. As such, from an IBC standpoint only:

A. PI anchors used in a seismically exempt application (see definition) are automatically approved by the LBO.

B. For other products, they are also automatically approved if they meet both of the following:

1. The components chosen are IBC-compliant-labeled (has been accepted by the most recent ES report from ICC-ES, NER from ICC-NTA, or ER report from IAPMO valid for the code edition in use or newer edition[1]) AND

2. The design and installation comply with the conditions of use and restrictions specified in the ICC report (in addition to and including following manufacturer instructions, particularly where more stringent). Installation must be verified by special inspector(s) when required by ICC-ES Report and/or IBC Ch. 17 on special inspection.

C. Products accepted by Los Angeles Dept. of Buildings (see footnote) are also acceptable at LANL except where specifically limited by the LANL Standards including Master Specs, when used in non-nuclear service and with any applicable conditions placed by LADBS.[2]

1. LADBS are at https://www.ladbs.org/forms-publications/publications/research-reports

D. Other special case components not automatically approved as noted above must be submitted to the Structural Standards POC who will help broker LBO approval prior to use.
Guidance: This may involve derating; e.g., using less tension and/or shear capacity than documented for a concrete anchor /embedment, using a mechanical rebar splice / coupler capacity that results in the final assembly 'performing' only within elastic region, etc.

[1] When a given product's research report isn't compliant with the applicable IBC edition, contact ESM POC for guidance.
[2] LADBS Building Code tab Information Bulletin IB/P/BC-2014-119 — Alternate Building Materials/Products Approval Requirements LADBS IB website