

INTERMOUNTAIN HEALTH UTAH DIALYSIS CENTER



OWNER

INTERMOUNTAIN HEALTH 36 SOUTH STATE STREET, 21ST FLOOR SALT LAKE CITY, UTAH 84111

ARCHITECT

INCLINE ARCHITECTS 747 E SOUTH TEMPLE ST., STE 105 SALT LAKE CITY, UTAH 84102



CIVIL ENGINEER

GREAT BASIN ENGINEERING 5746 S 1475 E. #200 OGDEN, UTAH 84403



STRUCTURAL ENGINEER

STRUCTURAL DESIGN STUDIO 225 E MURRAY HOLLADAY RD, #110 SALT LAKE CITY, UTAH 84117



MECHANICAL/PLUMBING ENGINEER

181 E 5600 S, #200 MURRAY, UTAH 8410

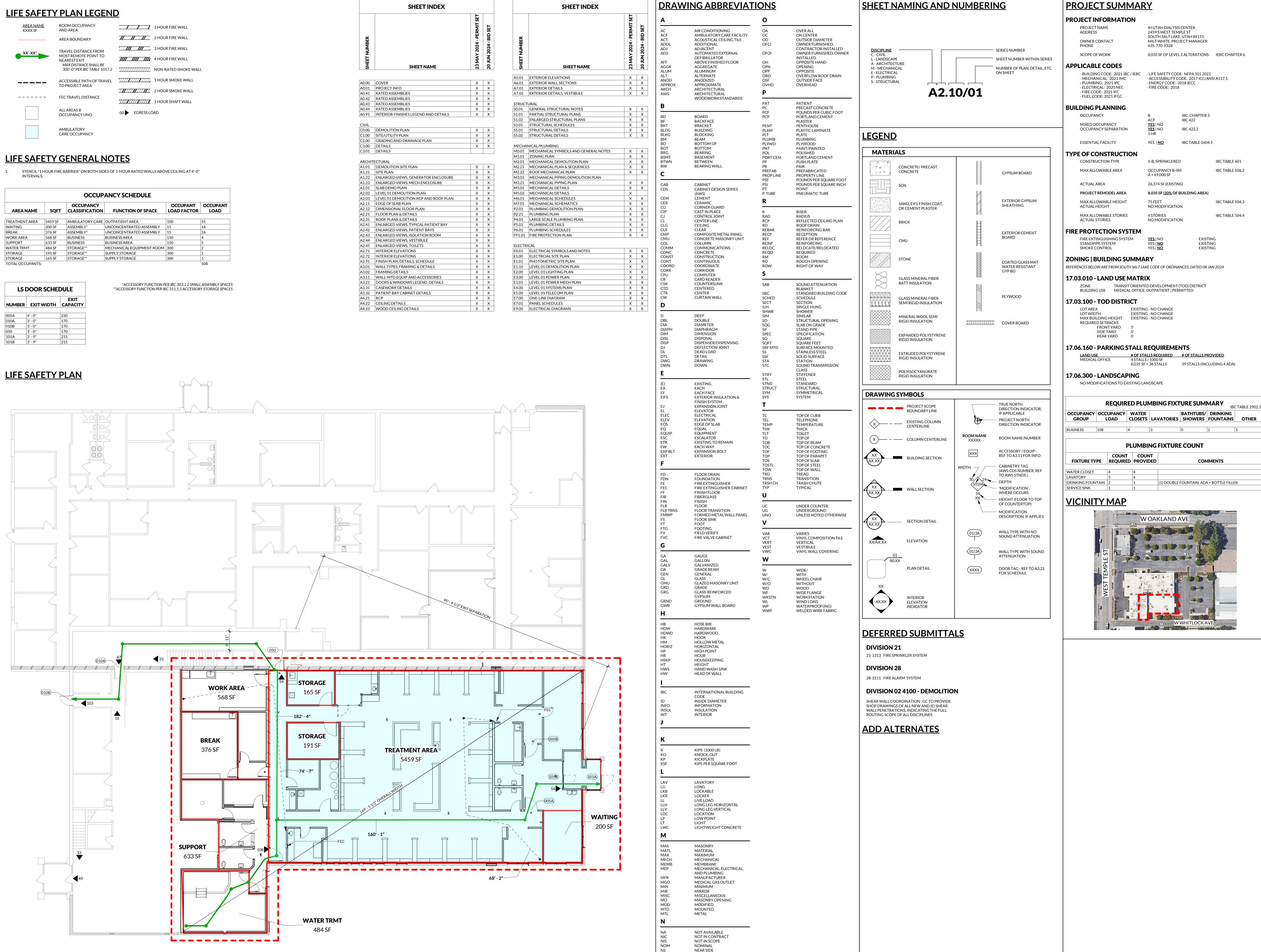


ELECTRICAL ENGINEER

BNA CONSULTING 4225 LAKE PARK BLVD, SUITE 275 WEST VALLEY CITY, UTAH 84120



BID SET



NOT TO SCALE

01 LIFE SAFETY PLAN 3/32" = 1'-0"

INCLINE ARCHITECTS 747 E SOUTH TEMPLE ST. STE #105 SALT LAKE CITY, UTAH 84102

STAMP

OWNER

INTERMOUNTAIN HEALTH 36 SOUTH STATE STREET, 21ST FLOOR SALT LAKE CITY, UTAH 84111

ARCHITECT

INCLINE ARCHITECTS 747 E SOUTH TEMPLE ST., STE 105 SALT LAKE CITY, UTAH 84102 **CIVIL ENGINEER GREAT BASIN ENGINEERING** 5746 S 1475 E. #200 OGDEN, UTAH 84403 **STRUCTURAL ENGINEER**

STRUCTURAL DESIGN STUDIO 225 E MURRAY HOLLADAY RD, #110 SALT LAKE CITY, UTAH 84117 **MECHANICAL/PLUMBING ENGINEER**

181 E 5600 S. #200 MURRAY, UTAH 84107 **ELECTRICAL ENGINEER** BNA CONSULTING 4225 LAKE PARK BLVD, SUITE 275 WEST VALLEY CITY, UTAH 84120

REVISIONS NO. DESCRIPTION 3 AHJ Response

INCLINE: 23-028

OWNER: 10017411

20 JUN 2024

BID SET

PROJECT INFO

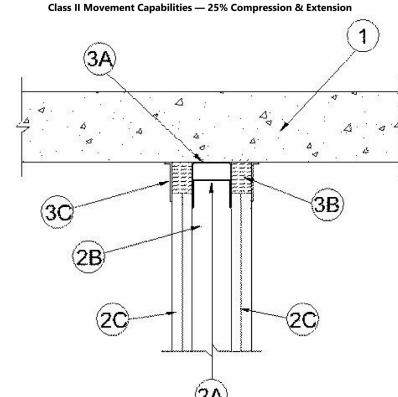
XHBN - Joint Systems

See General Information for Joint Systems

System No. HW-D-0108

June 26, 2023

Assembly Ratings — 1, 2, 3 and 4 Hr (See Item 2) L Rating at Ambient — Less than 1 CFM/Lin Ft L Rating at 400 F — Less than 1 CFM/Lin Ft Nominal Joint Width — 1-1/2 and 2 In. (See Item 3)



1. Floor Assembly — Min 4-1/2 in. (114 mm) thick steel reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) structural concrete. Floor may also be constructed of any min 6 in. (152 mm) thick UL Classified hollow-core Precast Concrete Units* See Precast Concrete Units (CFTV) category in the Fire Resistance Directory for names of manufacturers.

The hourly fire rating of the floor assembly shall be equal or greater than the hourly fire rating of the wall assembly.

2. Wall Assembly — The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Steel Floor and Ceiling Runners — Floor and ceiling runners of wall assembly shall consist of min No. 25 gauge galv steel channels sized to accommodate steel studs (Item 2B). Ceiling runner to be provided with 3 in. (76 mm) flanges. When U-shaped deflection channel is used, ceiling runner is installed within the U-shaped deflection channel (Item 3B) with 1 in. (25 mm) gap maintained between the

A1. Light Gauge Framing* - Slotted Ceiling Runner — When the nom joint width is less than or equal to 1-3/4 in. (44 mm), slotted ceiling runner may be used as an alternate to the ceiling runner in Item 2A. Slotted ceiling runner to consist of galv steel channel with slotted flanges sized to accommodate steel studs (Item 2B). Slotted ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 12 in. (305 mm) OC. When slotted ceiling runner is used, deflection channel (Item 3A) shall not be used. BRADY CONSTRUCTION INNOVATIONS INC, DBA SLIPTRACK SYSTEMS — SLP-TRK

CEMCO, LLC — CST

CLARKDIETRICH BUILDING SYSTEMS — Type SLT, SLT-H

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Type SLT

METAL-LITE INC — The System RAM SALES L L C — RAM Slotted Track

SCAFCO STEEL STUD MANUFACTURING CO

TELLING INDUSTRIES L L C — True-Action Deflection Track

A2. Light Gauge Framing* — Vertical Deflection Clip* — (Optional) — Steel clips can be used in conjunction with steel studs (Item 2B), ceiling runner (Item 2A) or deflection channel (Item 3A). Clips installed over the top of studs and inserted within the ceiling runner or deflection channel. Clip shall be secured to the ceiling runner or deflection channel with No. 8 self drilling, self tapping steel fasteners through holes provided within the clip. Clip may be secured to the stud with No. 6 pan head steel screw through holes provided within the clip. As an alternate, the legs of the clip may be installed over the top of the stud without attachment in accordance with manufacturer's installation instructions. FLEX-ABILITY CONCEPTS L L C — Three Legged Dog Deflection Clip

A3. Light Gauge Framing*- Notched Ceiling Runner — As an alternate to the ceiling runners in Items 2A through 2A3, notched ceiling runners to consist of C-shaped galv steel channel with notched return flanges sized to accommodate steel studs (Item 2B). Notched ceiling runner secured to concrete floor slab with steel masonry anchors spaced max 24 in. (610 mm) OC. When notched ceiling runner is used, deflection channel (Item 3A) shall not be used. **OLMAR SUPPLY INC** — Type SCR

B. Studs — Steel studs to be min 3-5/8 in. (92 mm) wide. Studs cut 3/4 in. (19 mm) less in length than assembly height with bottom nesting in and resting on floor runner and with top nesting in ceiling runner without attachment. When slotted ceiling runner (Item 2A1) is used, steel studs secured to slotted ceiling runner with No. 8 by 1/2 in. (13 mm) long wafer head steel screws at midheight of slot on each side of wall. Stud spacing not to exceed 24 in. (610 mm) OC.

C. Gypsum Board* — Gypsum board sheets installed to a min total thickness of 5/8 in., 1-1/4 in., 1-1/2 in. or 2 in. (16, 32, 38 or 51 mm) on each side of wall for 1, 2, 3 and 4 hr fire rated wall assemblies, respectively. Wall to be constructed as specified in the individual U400 Series Design in the UL Fire Resistance Directory, except that a nom 1-1/2 or 2 in. (38 or 51 mm) gap (see Item 3) shall be maintained between the top of the gypsum board and the bottom surface of the floor. The top row of screws shall be installed into the studs 4-3/4 in. (121 mm) below floor. The hourly fire rating of the joint system is equal to the hourly fire rating of the wall.

3. Joint System — The max separation between bottom of floor and top of wall (at time of installation of joint system) is dependent upon the hourly rating of the wall. Max separation between bottom of floor and top of wall (at time of installation of joint system) is 1-1/2 in. (38 mm) for 1 hr fire rated assemblies and 2 in. (51 mm) for 2, 3 and 4 hr fire rated assemblies. The joint system is designed to accommodate a max 25 percent compression or extension from its installed width. The joint system shall consist of an optional deflection channel, and forming and fill materials as follows: A. Deflection Channel — (Optional) - A nom 3-3/4 in. (95 mm) wide by min 3 in. (76 mm) deep min 25 gauge steel U-shaped channel. Deflection channel secured to concrete floor slab with steel masonry anchors spaced max 12 in. (305 mm) OC. The ceiling runner (Item 2A) is installed within the deflection channel to maintain a 1 in. (25 mm) gap between the top of the ceiling runner and the top of the

B. Forming Material* — Strips of min 4 pcf (64 kg/m³) mineral wool batt insulation cut to a thickness equal to the overall thickness of the gypsum board and compressed 50 percent in thickness and installed cut edge first to fill the gap between the top of the wall and bottom of the floor. The forming material shall be flush with both surfaces of the wall.

afacturer of forming material used within the joint system is dependent upon the hourly rating of the wall assembly as shown in the table below:		
Rating of Wall, hr	Manufacturer of Mineral Wool	Type of Mineral Wool
1, 2, & 3	IIG Minwool	MinWool-1200 Safing
1, 2, 3, & 4	Roxul Inc	SAFE Mineral Wool
1 & 2	Rock Wool Manufacturing	Delta Safing Insulation

INDUSTRIAL INSULATION GROUP L L C — MinWool-1200 Safing

deflection channel. The ceiling runner is not fastened to the deflection channel.

JOHNS MANVILLE — Safing

ROCK WOOL MANUFACTURING CO — Delta Safing Board

ROCKWOOL MALAYSIA SDN BHD — SAFE

ROCKWOOL — SAFE

THERMAFIBER INC — SAF

C. Fill, Void or Cavity Material* — Sealant — Min 1/16 in. (1.6 mm) dry thickness (min 1/8 in. or 3.2 mm wet thickness) of fill material spray or brush applied over mineral wool on each side of the wall between the top of the wall and the bottom of the concrete floor and overlapping a min 1/2 in. (13 mm) onto the concrete floor and gypsum board on both sides of wall. RECTORSEAL — FlameSafe FS3000, Metacaulk 1200, 1500 or Biostop 750, 800 Spray

> * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. Last Updated on 2023-06-26

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- Authorities Having Jurisdiction should be consulted before construction. • Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

always address every construction nuance encountered in the field.

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See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

Design No. **U465**

March 15, 2024

Nonbearing Wall Rating — 1 HR. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

1. Floor and Ceiling Runners — (Not Shown) — Channel shaped runners, 3-5/8 in. deep (min), 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced

1A. Framing Members* — Floor and Ceiling Runners — (Not Shown) — As an alternate to Item 1 — Channel shaped, min 3-5/8 in. deep, attached to floor and ceiling with fasteners 24 in. OC. max. **ALLSTEEL & GYPSUM PRODUCTS INC** — Type SUPREME D24/30EQD and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME D24/30EQD and Type SUPREME D20 **QUAIL RUN BUILDING MATERIALS INC** — Type SUPREME D24/30EQD and Type SUPREME D20

SCAFCO STEEL STUD MANUFACTURING CO — Type SUPREME D24/30EQD and Type SUPREME D20 **STEEL CONSTRUCTION SYSTEMS INC** — Type SUPREME D24/30EQD and Type SUPREME D20

TELLING INDUSTRIES L L C — Type SUPREME D24/30EQD and Type SUPREME D20

UNITED METAL PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

1B. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in, thick galy steel, attached to floor and ceiling with fasteners spaced 24 in, OC max. **CEMCO, LLC** — Viper20[™] Track

MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track

1C. Floor and Ceiling Runners — (Not Shown) — For use with Item 2C — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, min depth to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners spaced max 24 in. OC.

1D. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1C — For use with Item 2D and 4G only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. **CLARKDIETRICH BUILDING SYSTEMS** — CD ProTRAK DMFCWBS L L C — ProTRAK

MBA METAL FRAMING — ProTRAK

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RAM SALES L L C — Ram ProTRAK STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProTRAK

TELLING INDUSTRIES L L C — TRUE-TRACK™

KIRII (HONG KONG) LTD — Type KIRII

in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

from min 25 MSG (0.018 in. min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max.

1E. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1D — For use with Item 2E and 4I only, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8

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1F. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1E — For use with Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 25 MSG steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

1G. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 through 1F — For use with Item 2, channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide, attached to floor and ceiling with fasteners spaced 24 in. OC max. STUDCO BUILDING SYSTEMS — CROCSTUD Track

1H. Floor and Ceiling Runners — (Not Shown) — Channel shaped, fabricated from min 0.02 in. galv steel, min width to accommodate stud size, with min 1 in. long legs, for use with studs specified below and fabricated from min 0.02 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max 24 in. OC. MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track VT100 IMPERIAL MANUFACTURING GROUP INC — Viper20™ Track VT100

11. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2H, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ Track

1J. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 — For use with Item 2 L, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. RESCUE METAL FRAMING, L L C — AlphaTRAK

CEMCO, LLC — Viper X Track

1K. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2M, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep, fabricated

1L. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Item 1 — For use with Item 2N, proprietary channel shaped runners, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. CRACO MFG INC — SmartTrack20™

1M. Framing Members* - Floor and Ceiling Runners - Not shown - In lieu of Items 1 through 1L - For use with Item 2O, proprietary channel shaped runners, min 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 20 MSG galv steel (0.0329 in. min bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max. PANEL REY S A - SUPRA Track 20/33 mil

1N. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 – For use with Item 2P, proprietary channel shaped runners, 1-1/4 in. wide by min. 3-5/8 in. deep fabricated from min 0.019 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. PANEL REY S A - SUPRA Track 20EQ/19 mil

10. Framing Members* — Floor and Ceiling Runner — (Not Shown — Alternate to Item 1) — For use with Item 2Q, channel shaped runners pre-equipped with proprietary attachment clips. Min. 3-5/8 in. wide. Legs of top runners minimum 3-1/4 in. wide. Legs of bottom runners minimum 1-1/2 in. wide. Runners attached to floor and ceiling with fasteners 24 in. OC max.

1P. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 – For use with Item 2R, proprietary channel shaped runners, 1-1/4 in, wide by min, 3-5/8 in, deep fabricated from min, 20 EQ/22 mils, (min. 0.0221 in. thick) galvanized steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. JJC INTERNATIONAL DISTRIBUTORS — Non-structural Tracks 3-5/8" and 6"

1Q. Framing Members* — Floor and Ceiling Runners — Not Shown — In lieu of Items 1 — _For use with Item 2R, proprietary channel shaped runners, 1-1/4 in. deep by min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. **IRONLINE METALS LLC** — Bantam Track.

2. Steel Studs — Channel shaped, 3-5/8 in. deep (min), formed from min No. 25 MSG galv steel spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. A. Framing Members* — Steel Studs — As an alternate to Item 2 — Channel shaped studs, min 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. **ALLSTEEL & GYPSUM PRODUCTS INC** — Type SUPREME D24/30EQD and Type SUPREME D20

CONSOLIDATED FABRICATORS CORP, BUILDING PRODUCTS DIV — Type SUPREME D24/30EQD and Type SUPREME D20

QUAIL RUN BUILDING MATERIALS INC — Type SUPREME D24/30EQD and Type SUPREME D20 https://iq.ulprospector.com/en/profile?e=15021

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STEEL CONSTRUCTION SYSTEMS INC — Type SUPREME D24/30EQD and Type SUPREME D20 **TELLING INDUSTRIES L L C** — Type SUPREME D24/30EQD and Type SUPREME D20

wide by 3-5/8 in. deep, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height.

MARINO/WARE, DIV OF WARE INDUSTRIES INC — StudRite™

RESCUE METAL FRAMING, L L C — AlphaSTUD

UNITED METAL PRODUCTS INC — Type SUPREME D24/30EQD and Type SUPREME D20

2B. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1B, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. CEMCO, LLC — Viper20™

CRACO MFG INC — SmartStud20™ MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™ IMPERIAL MANUFACTURING GROUP INC — Viper20™

2C. Steel Studs — (As an alternate to Item 2, For use with Item 1C) — Channel shaped, fabricated from min 20 MSG corrosion-protected or galv steel, 3-1/2 in. min depth, spaced a max of 16 in. OC. Studs friction-fit into floor and ceiling runners. Studs to be cut 5/8 to 3/4 in. less than assembly height. See materials in Item(s) 4 that require Item 2C studs.

2D. **Framing Members*** — **Steel Studs** — As an alternate to Items 2 through 2C — For use with Item 1D and 4G only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel. spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height.

 $\textbf{CLARKDIETRICH BUILDING SYSTEMS} - \mathsf{CD\ ProSTUD}$ DMFCWBS L L C — ProSTUD

MBA METAL FRAMING — ProSTUD **RAM SALES L L C** — Ram ProSTUD

STEEL STRUCTURAL PRODUCTS L L C — Tri-S ProSTUD

2E. Framing Members* — Steel Studs — As an alternate to Items 2 through 2D — For use with Item 1E and 4I only, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. TELLING INDUSTRIES L L C — TRUE-STUD™

2F. Framing Members* — Steel Studs — As an alternate to Items 2 through 2E — For use with Item 1F, channel shaped studs, min 3-5/8 in. wide fabricated from min 25 MSG steel, spaced a max of 24 in. OC. Studs to be cut 1/2 in. less than assembly height. KIRII (HONG KONG) LTD — Type KIRII

2G. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 through 2F — For use with Item 1G. Proprietary channel shaped studs, minimum 3-5/8 in. wide, Studs to be cut 1/2 in. less than the assembly height. STUDCO BUILDING SYSTEMS — CROCSTUD

2H. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1I, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. MARINO/WARE, DIV OF WARE INDUSTRIES INC — Viper20™

21. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. **EB METAL INC** — NITROSTUD

2J. Framing Members* — Steel Studs — In lieu of Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 3-5/8 in. deep (min), spaced 24 in. OC max. Studs to be cut 3/4 in. less than assembly height. OLMAR SUPPLY INC — PRIMESTUD

2K. Framing Members* — Steel Studs — As an alternate to Item 2 — For use with Item 1B (3-5/8 in. wide track), channel shaped studs, fabricated from min 25 MSG corrosion-protected steel, 1-1/4 in.

2L. Framing Members* — Steel Studs — As an alternate to Items 2 — For use with Item 1J, channel shaped studs, min 3-5/8 in. wide fabricated from min 0.018 in. thick galv steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height.

2M. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1K, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep, fabricated from min 25 MSG (0.018 in. min. bare metal thickness). Studs cut 3/4 in. less in length than assembly height.

2N. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1L, proprietary channel shaped steel studs, 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min 0.020 in. thick galv steel. Studs cut 3/4 in. less in length than assembly height. https://iq.ulprospector.com/en/profile?e=15021

CRACO MFG INC — SmartStud20™

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20. Framing Members* - Steel Studs - Not Shown - In lieu of Items 2 through 2N - For use with Item 1M, proprietary channel shaped steel studs, min 1-5/8 in. wide by min 3-5/8 in. deep fabricated from min 20 MSG galv steel (0.0329 in. min bare metal thickness) spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height. PANEL REY S A - SUPRA Stud 20/33 mil

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2P. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 – For use with Item 1N, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep with 1/4 in. return lips fabricated from min 0.019 in. thick galv steel, spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height. PANEL REY S A - SUPRA Stud 20EQ/19 mil

2Q. Framing Members* — Steel Studs — (Not Shown — Alternate to Item 2, For use with Item 10) — Channel shaped steel studs with attachment clips at top and bottom, min 3-5/8 in. depth, spaced a max of 24 in. OC.

2R, Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 – For use with Item 1P, proprietary channel shaped steel studs, min 1-1/4 in, wide by min 3-5/8 in, deep fabricated from min, 20 EQ/22 mils, (min,

Studs clipped into floor and ceiling runners (Item 10). Max 2-3/8 in. extension reveal from top of stud to inside of ceiling runner. **HYPERFRAME INC**— Hyperstud

0.0221 in. thick) galvanized steel, spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height. JJC INTERNATIONAL DISTRIBUTORS — Non-structural Studs 3-5/8" and 6".

2R. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 – For use with Item 1Q, proprietary channel shaped steel studs, min 1-1/4 in. wide by min 3-5/8 in. deep fabricated from min. min. 0.018 in. thick galvanized steel, spaced 24 in. OC max. Studs cut 3/4 in. less in length than assembly height. **IRONLINE METALS LLC** — Bantam Stud.

3. Batts and Blankets* — (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. See Batts and Blankets (BZJZ) category for names of Classified companies.

ROCKWOOL — Type AFB, min. density 1.69 pcf / 27.0 kg/m³

ROCKWOOL MALAYSIA SDN BHD — Type Acoustical Fire Batts

3A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — (100% Borate Formulation) — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft³. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft³, in accordance with the application instructions supplied with the product. Applegate Greenfiber Acquisition LLC — Insulmax and SANCTUARY for use with wet or dry application.

3B. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. **NU-WOOL CO INC** — Cellulose Insulation

3C. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft³. INTERNATIONAL CELLULOSE CORP — Celbar-RL

3D. Batts and Blankets* — For use with Item 8, Nom 3 in, thick, minimum 3.4 pcf mineral wool batts, friction fit between the studs and floor and ceiling runners. See **Batts and Blankets** (BZJZ) category for names of manufacturers.

3E. Batts and Blankets* — For use with Item 4R and 4S. Placed in stud cavities, any min. 3-1/2 in. thick glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance See **Batts and Blankets** (BKNV or BZJZ) Categories for names of Classified companies.

3F. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 3) — Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft³. Applegate Greenfiber Acquisition LLC— Applegate Advanced Stabilized Cellulose Insulation

3G. Foamed Plastic* — As an alternate to Batts and Blankets (Items 3-3F), for use with Item 4U — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. When foamed

plastic is used, minimum stud depth shall be 3-1/2 in, with min, 20 MSG thickness. CARLISLE SPRAY FOAM INSULATION — Types SealTite ONE, SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, Foamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

3H. Foamed Plastic* — As an alternate to Batts and Blankets (Items 3-3F), for use with Item 4U — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. When foamed plastic is used, minimum stud depth shall be 3-1/2 in. with min. 20 MSG thickness. BASF CORP - Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US-N, Walltite® HP+, FE137®, FE158®, Spraytite® 158, Spraytite® SP, Spraytite® 81205, Spraytite® Comfort XL, Walltite® XL, and Walltite® MAX

4. **Gypsum Board*** — 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When Steel Framing Members* (Item 6 or any alternate clips) are used, gypsum board is screw attached to furring https://iq.ulprospector.com/en/profile?e=15021

RATED ASSEMBLY GENERAL NOTES

REFER TO SPECIFICATION SECTION 01 4000 - QUALITY REQUIREMENTS FOR SPECIFIC PROJECT REQUIREMENTS.

PARTIAL UL LISTINGS PROVIDED FOR ATTACHMENT REFERENCE ONLY. REFER TO FULL UL LISTING FOR COMPLETE ASSEMBLY REQUIREMENTS. DETAILS SHOWN ARE TYPICAL DETAILS. FIELD CONDITIONS MAY VARY AND MAY REQUIRE APPROVAL OF AN ALTERNATE DETAIL, FIFLD CONDITIONS AND DIMENSIONS NEED TO BE VERIFIED FOR COMPLIANCE WITH THE DETAILS. INCLUDING BUT NOT LIMITED TO THE FOLLOWING: MINIMUM AND MAXIMUM WIDTH OF JOINTS, TYPE AND THICKNESS OF FIRE-

RATED CONSTRUCTION. MINIMUM RATING OF THE FIRE STOP ASSEMBLY SHALL MEET OR EXCEED THE HIGHEST RATING OF THE ADJACENT CONSTRUCTION. MANUFACTURER'S ENGINEERING JUDGMENT DRAWING SHALL BE ISSUED IF ALTERNATE DETAILS MATCHING THE FIELD CONDITIONS ARE NOT AVAILABLE. DRAWINGS SHALL

FOLLOW THE INTERNATIONAL FIRESTOP COUNCIL (IFC) GUIDELINES FOR EVALUATION FIRESTOP SYSTEM ENGINEERING JUDGMENTS. REFERENCES: 2013 UNDERWRITER'S LABORATORIES FIRE RESISTANCE DIRECTORY; VOL 1 & 2. NFPA 101 LIFE SAFETY CODE, NFPA 70 - NATIONAL ELECTRIC CODE, AND ALL GOVERNING LOCAL AND REGIONAL BUILDING CODES

FIRESTOP SYSTEM INSTALLATION MUST MEET REQUIREMENTS OF ASTM E-814 (UL 1479) FESTED ASSEMBLIES THAT PROVIDE A FIRE RATING EQUAL TO THAT OF CONSTRUCTION BEING PENETRATED. ALL RATED THROUGH-PENETRATION ASSEMBLIES SHALL BE PROMINENTLY LABELED WITH THE FOLLOWING INFORMATION: "ATTENTION: FIRE RATED ASSEMBLY". "UL SYSTEM#". HOUR

RESISTANT DIRECTORY-VOLUME 1.

1/9

RATING (F-RATING), AND INSTALLATION DATE ("DAY-MONTH-YEAR", EXAMPLE; 01 JAN, 2024).

FOR OUTLET BOXES REQUIRING PROTECTION, USE ONLY WALL OPENING PROTECTIVE

MATERIALS, CATEGORY 'CLIV' AS CLASSIFIED BY UNDERWRITER'S LABORATORIES, FIRE

INCLINE ARCHITECTS 747 E SOUTH TEMPLE ST. STE #105 SALT LAKE CITY, UTAH 84102

STAMP

INTERMOUNTAIN HEALTH 36 SOUTH STATE STREET, 21ST FLOOR SALT LAKE CITY, UTAH 84111

747 E SOUTH TEMPLE ST., STE 105 SALT LAKE CITY, UTAH 84102 **CIVIL ENGINEER** GREAT BASIN ENGINEERING

ARCHITECT

INCLINE ARCHITECTS

5746 S 1475 E. #200 OGDEN, UTAH 84403 STRUCTURAL ENGINEER STRUCTURAL DESIGN STUDIO 225 E MURRAY HOLLADAY RD, #110

SALT LAKE CITY, UTAH 84117 MECHANICAL/PLUMBING **ENGINEER**

181 E 5600 S. #200

MURRAY, UTAH 84107 **ELECTRICAL ENGINEER** BNA CONSULTING 4225 LAKE PARK BLVD, SUITE 275 WEST VALLEY CITY, UTAH 84120



20 JUN 2024

REVISIONS

NO. DESCRIPTION

RATED