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Addendum No. 2, May 22, 2025

- Re: Johnson Hall Renovation PKG 3 Johnson Hall Renovation & Foster Demolition Tennessee Technological University SBC Project No. 364/011-04-2022CM
- From: Upland Design Group, Inc. P.O. Box 1026 (38557) 362 Industrial Blvd. Crossville, TN 38555 Telephone (931) 484 7541 Fax (931) 484 2351



To: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated March 28, 2025, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of 1 page and 9 pages of attachments (10 pages total).

Clarifications

- 1) The structure under Elev. Equip. 404A needs to be protected per UL Detail D904. This protection comes in the form of a spray-applied fire resistive material of a minimum thickness of 9/16" per UL Detail on the beams directly under space 404A.
- 2) The ceilings at the doors into Auditorium 141 are changed to a rated ceiling. The locations of the existing walls into Auditorium 141 relative to the duct work serving the other floor do not allow for fire dampers at the wall. Creating the protected ceiling allows for dampers at other adjacent locations.

Changes to Specifications:

3) Add attached Section 07 81 00 Applied Fireproofing.

Changes to Drawings:

- 4) Refer to Cover Sheet 1. Revise current revision and current revision dates for sheets modified by this addendum on the Index to Drawings.
- 5) Refer to sheet GN2.1 UL Pages. Add UL Detail D904.
- 6) Refer to sheet A7.10 Reflected Ceiling Plan First Floor. Change the ceilings at the doors at Auditorium 141 to 2 layers of gypsum board on 3 5/8" metal studs @ 16" O.C.. Extend furr downs to deck above. Protect all openings / penetrations.
- 7) Refer to sheet A7.30 Reflected Ceiling Plan Third Floor. Provide sprayed fire-resistive materials (SFRM) on beams in their entirety under Elev. Equip. 404A per UL Detail D904

END OF ADDENDUM

Section 07 81 00 Applied Fireproofing

Part 1 General

1.1 Summary

A. Section includes sprayed fire-resistive materials (SFRM).

1.2 Action Submittals

- A. Product Data: For each type of product.
- B. Shop Drawings: Framing plans, schedules, or both, indicating the following:
 - 1. Extent of fireproofing for each construction and fire-resistance rating.
 - 2. Applicable fire-resistance design designations of a qualified testing and inspecting agency acceptable to authorities having jurisdiction.
 - 3. Minimum fireproofing thicknesses needed to achieve required fire-resistance rating of each structural component and assembly.
 - 4. Treatment of fireproofing after application.

1.3 Informational Submittals

- A. Qualification Data: For Installer and testing agency.
- B. Product Certificates: For each type of fireproofing.
- C. Evaluation Reports: For fireproofing, from ICC-ES.

1.4 Quality Assurance

A. Installer Qualifications: A firm or individual certified, licensed, or otherwise qualified by fireproofing manufacturer as experienced and with sufficient trained staff to install manufacturer's products according to specified requirements.

1.5 Preconstruction Testing

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction testing on fireproofing.
 - 1. Provide test specimens and assemblies representative of proposed materials and construction.
- B. Preconstruction Adhesion and Compatibility Testing: Test for compliance with requirements for specified performance and test methods.
 - 1. Bond Strength: Test for cohesive and adhesive strength according to ASTM E 736. Provide bond strength indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
 - 2. Density: Test for density according to ASTM E 605. Provide density indicated in referenced fire-resistance design, but not less than minimum specified in Part 2.
 - 3. Verify that manufacturer, through its own laboratory testing or field experience, attests that primers or coatings are compatible with fireproofing.
 - 4. Schedule sufficient time for testing and analyzing results to prevent delaying the Work.
 - 5. For materials failing tests, obtain applied-fireproofing manufacturer's written instructions for corrective measures including the use of specially formulated

bonding agents or primers.

1.6 Field Conditions

- A. Environmental Limitations: Do not apply fireproofing when ambient or substrate temperature is 44 deg F (7 deg C) or lower unless temporary protection and heat are provided to maintain temperature at or above this level for 24 hours before, during, and for 24 hours after product application.
- B. Ventilation: Ventilate building spaces during and after application of fireproofing, providing complete air exchanges according to manufacturer's written instructions. Use natural means or, if they are inadequate, forced-air circulation until fireproofing dries thoroughly.

Part 2 - Products

2.1 Manufacturer

- A. Subject to compliance with requirements, provide products by one of the following.
 - 1. Isolatek International, www.isolatek.com (Design Basis)
 - 2. GCP Advanced Technologies Construction Products; (Design Basis Monokote MK-6 Series)
 - 3. Cafco

2.2 Materials, General

- A. Assemblies: Provide fireproofing, including auxiliary materials, according to requirements of each fire-resistance design and manufacturer's written instructions.
- B. Fire-Resistance Design: Indicated on Drawings, tested according to ASTM E 119 or UL 263 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Steel members are to be considered unrestrained unless specifically note otherwise.
- C. Asbestos: Provide products containing no detectable asbestos.

2.3 Sprayed Fire-Resistive Materials (SFRM)

- A. Manufacturer's standard, factory-mixed, lightweight, dry formulation, complying with indicated fire-resistance design, and mixed with water at Project site to form a slurry or mortar before conveyance and application or conveyed in a dry state and mixed with atomized water at place of application.
 - 1. Bond Strength (ASTM E 736): Minimum 200-lbf/sq. ft. (9.58-kPa) cohesive and adhesive strength based on field testing.
 - 2. Density (ASTM E 605): Not less than 15 lb/cu. ft. (240 kg/cu. m) and as specified in the approved fire-resistance design.
 - 3. Thickness: As required for fire-resistance design indicated, measured requirements of fire-resistance design or ASTM E 605, whichever is thicker, but not less than 0.375 inch (9 mm).
 - 4. Surface-Burning Characteristics (ASTM E 84):
 - a. Flame-Spread Index: 0.
 - b. Smoke-Developed Index: 0.
 - 5. Corrosion Resistance (ASTM E 937): No evidence of corrosion.

Section 07 81 00 Applied Fireproofing Added in Addendum #2

- 6. Deflection (ASTM E 759): No cracking, spalling, or delamination.
- 7. Fungal Resistance: Treat products with manufacturer's standard antimicrobial formulation to result in no growth on specimens per ASTM G 21.

2.4 Auxiliary Materials

- A. General: Provide auxiliary materials that are compatible with fireproofing and substrates and are approved by UL or another testing and inspecting agency acceptable to authorities having jurisdiction for use in fire-resistance designs indicated.
- B. Substrate Primers: Primers approved by fireproofing manufacturer and complying with one or both of the following requirements:
 - 1. Primer and substrate are identical to those tested in required fire-resistance design by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
 - 2. Primer's bond strength in required fire-resistance design complies with specified bond strength for fireproofing and with requirements in UL's "Fire Resistance Directory" or in the listings of another qualified testing agency acceptable to authorities having jurisdiction, based on a series of bond tests according to ASTM E 736.
- C. Bonding Agent: Product approved by fireproofing manufacturer and complying with requirements in UL's "Fire Resistance Directory" or in the listings of another qualified testing agency acceptable to authorities having jurisdiction.
- D. Sealer: Transparent-drying, water-dispersible, tinted protective coating recommended in writing by fireproofing manufacturer for each fire-resistance design.
 - 1. Product: Subject to compliance with requirements, provide "Cafco Bond-Seal Type X" by Isolatek International or approved substitute by CIL Group.

Part 3 - Execution

3.1 Examination

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for substrates and other conditions affecting performance of the Work and according to each fire-resistance design. Verify compliance with the following:
 - 1. Substrates are free of dirt, oil, grease, release agents, rolling compounds, mill scale, loose scale, incompatible primers, paints, and encapsulants, or other foreign substances capable of impairing bond of fireproofing with substrates under conditions of normal use or fire exposure.
 - 2. Objects penetrating fireproofing, including clips, hangers, support sleeves, and similar items, are securely attached to substrates.
 - 3. Substrates receiving fireproofing are not obstructed by ducts, piping, equipment, or other suspended construction that will interfere with fireproofing application.
- B. Verify that concrete work on steel deck has been completed before beginning fireproofing work.
- C. Verify that roof construction, installation of roof-top HVAC equipment, and other related work is complete before beginning fireproofing work.
- D. Conduct tests according to fireproofing manufacturer's written recommendations to verify

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that substrates are free of substances capable of interfering with bond.

- E. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 Preparation

- A. Cover other work subject to damage from fallout or overspray of fireproofing materials during application.
- B. Clean substrates of substances that could impair bond of fireproofing.
- C. Prime substrates where included in fire-resistance design and where recommended in writing by fireproofing manufacturer unless compatible shop primer has been applied and is in satisfactory condition to receive fireproofing.
- D. For applications visible on completion of Project, repair substrates to remove surface imperfections that could affect uniformity of texture and thickness in finished surface of fireproofing. Remove minor projections and fill voids that would telegraph through fire resistive products after application.

3.3 Application

- A. Construct fireproofing assemblies that are identical to fire-resistance design indicated and products as specified, tested, and substantiated by test reports; for thickness, primers, sealers, topcoats, finishing, and other materials and procedures affecting fireproofing work.
- B. Comply with fireproofing manufacturer's written instructions for mixing materials, application procedures, and types of equipment used to mix, convey, and apply fireproofing; as applicable to particular conditions of installation and as required to achieve fire-resistance ratings indicated.
- C. Coordinate application of fireproofing with other construction to minimize need to cut or remove fireproofing.
 - 1. Do not begin applying fireproofing until clips, hangers, supports, sleeves, and other items penetrating fireproofing are in place.
 - 2. Defer installing ducts, piping, and other items that would interfere with applying fireproofing until application of fireproofing is completed.

D. Metal Decks:

- 1. Do not apply fireproofing to underside of metal deck substrates until concrete topping, if any, has been completed.
- 2. Do not apply fireproofing to underside of metal roof deck until roofing has been completed; prohibit roof traffic during application and drying of fireproofing.
- E. Install auxiliary materials as required, as detailed, and according to fire-resistance design and fireproofing manufacturer's written recommendations for conditions of exposure and intended use. For auxiliary materials, use attachment and anchorage devices of type recommended in writing by fireproofing manufacturer.
- F. Spray apply fireproofing to maximum extent possible. Following the spraying operation in each area, complete the coverage by trowel application or other placement method recommended in writing by fireproofing manufacturer.
- G. Apply fireproofing with variation in relief (spray texture) no greater than 1/8" inch when measured with a 1-foot straight edge.

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- H. Extend fireproofing in full thickness over entire area of each substrate to be protected.
- I. Install body of fireproofing in a single course unless otherwise recommended in writing by fireproofing manufacturer.
- J. Where sealers are used, apply products that are tinted to differentiate them from fireproofing over which they are applied.
- K. Provide a uniform finish complying with description indicated for each type of fireproofing material.
- L. Cure fireproofing according to fireproofing manufacturer's written recommendations.
- M. Do not install enclosing or concealing construction until after fireproofing has been applied, inspected, and tested and corrections have been made to deficient applications.
- N. Finishes: Where indicated, apply fireproofing to produce the following finishes:1. Spray-Textured Finish: Finish left as spray applied with no further treatment.

3.4 Field Quality Control

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Test and inspect as required by the IBC, 1704.10.
- B. Perform the tests and inspections of completed Work in successive stages. Do not proceed with application of fireproofing for the next area until test results for previously completed applications of fireproofing show compliance with requirements. Tested values must equal or exceed values as specified and as indicated and required for approved fire-resistance design.
- C. Fireproofing will be considered defective if it does not pass tests and inspections.
 - 1. Remove and replace fireproofing that does not pass tests and inspections, and retest.
 - 2. Apply additional fireproofing, per manufacturer's written instructions, where test results indicate insufficient thickness, and retest.
- D. Prepare test and inspection reports.

3.5 Cleaning, Protecting, And Repairing

- A. Cleaning: Immediately after completing spraying operations in each containable area of Project, remove material overspray and fallout from surfaces of other construction and clean exposed surfaces to remove evidence of soiling.
- B. Protect fireproofing, according to advice of manufacturer and Installer, from damage resulting from construction operations or other causes, so fireproofing will be without damage or deterioration at time of Substantial Completion.
- C. As installation of other construction proceeds, inspect fireproofing and repair damaged areas and fireproofing removed due to work of other trades.
- D. Repair fireproofing damaged by other work before concealing it with other construction.
- E. Repair fireproofing by reapplying it using same method as original installation or using manufacturer's recommended trowel-applied product.

End Of Section

JOHNSON HALL RENOVATION - PKG 3 VOL 1 JOHNSON HALL RENOVATION & FOSTER DEMOLITION

TENNESSEE TECHNOLOGICAL UNIVERSITY

REGULATORY	REQUIREMENTS		DEX TO DRAWIN	GS				
LISTED BELOW ARE THE REGULATORY REQUIREMENTS THAT APPLY TO THIS PROJECT, RE CONVENIENCE TO THE CONTRACTOR AND IS NOT TO BE CONSIDERED ALL INCLUSIVE OF (PERTINENT CODES, STANDARDS, REGULATIONS AND LAWS.	FER TO SECTION 01 41 14 REGULATORY REQUIREMENTS. THIS LIST IS PROVIDED AS A CODES AND REGULATIONS THAT MAY APPLY. THE CONTRACTOR SHALL COMPLY WITH ALL	Sheet Number	Sheet Name	Sheet Issue Date	Current Current Revision Revision Date	Sheet Number	Sheet Name	Sheet Issue Date
 (A) INTERNATIONAL BUILDING CODE (IBC), 2012 EDITION, PUBLISHED BY THE INTERNATIONAL FUEL GAS CODE (IFGC), 2012 EDITION, PUBLISHED BY THE INTERNATIONAL FUEL GAS CODE (IFGC), 2012 EDITION, PUBLISHED BY THE INTE (C) THE INTERNATIONAL MECHANICAL CODE (IMC), 2012 EDITION, PUBLISHED BY THE INTE (E) THE INTERNATIONAL PLUMBING CODE (IPC), 2012 EDITION, PUBLISHED BY THE INTERNATIONAL PROPERTY MAINTENANCE CODE (IPMC), 2012 EDITION, PUBLISHED FY THE INTERNATIONAL PROPERTY MAINTENANCE CODE (IPMC), 2012 EDITION, PUBLISHED BY THE INTERNATIONAL FIRE CODE (IFC), 2012 EDITION, PUBLISHED BY THE INTERNATIONAL FREGOY CONSERVATION CODE (IECC), 2012 EDITION, PUBLISHED INTERNATIONAL ENERGY CONSERVATION CODE, 2006 EDITION, SHALL APPLY TO T BUILDING CODE (IBC), 2012 EDITION: MODERATE-HAZARD FACTORY INDUSTRIAL, GROUP F-1; LOW-HAZARD FACTORY INDUSTRIAL, GROUP F-2; MODERATE-HAZARD STORAGE, GROUP S-2; (H) THE INTERNATIONAL EXISTING BUILDING CODE (IEBC), 2012 EDITION, PUBLISHED BY INFERNATIONAL EXISTING BUILDING CODE (IEBC), 2012 EDITION, PUBLISHED BY (I) FOR STATE BUILDINGS, EDUCATIONAL OCCUPANCIES AND ANY OTHER OCCUPANCY RILIFE SAFETY CODE, 2012 EDITION, PUBLISHED BY THE INTERNATIONAL EXISTING BUILDING CODE (IEBC), 2012 EDITION, PUBLISHED BY (I) FOR STATE BUILDINGS, EDUCATIONAL OCCUPANCIES AND ANY OTHER OCCUPANCY RILIFE SAFETY CODE, 2012 EDITION, PUBLISHED BY THE NATIONAL FIRE PROTICINS. JNO PROVISION OF THE PRECEDING CITED PUBLICATIONS SHALL BE ADOPTED THAT COLS. THE INSTALLATION AND SERVICE STANDARDS OF PORTABLE FIRE EXTINGUISHER 2. THE STANDARDS FOR ENGAGING IN THE LIQUEFIED PETROLEUM GAS BUSINESS II (K) NATIONAL ELECTRIC CODE, NFPA 70, 2017 EDITION, PUBLISHED BY THE NATIONAL FIRE PROTICINS SHALL ELECTRIC CODE, NFPA 70, 2017 EDITION, PUBLISHED BY THE NATIONAL FIRE ATIONAL FOR ACCESSIBILITY ACT 2010 ADA STANDARDS FOR ACCESSIBILITY ACT 2010 AD	ONAL CODE COUNCIL (ICC), EXCEPT FOR: RNATIONAL CODE COUNCIL (ICC); TERNATIONAL CODE COUNCIL (ICC); ED BY THE INTERNATIONAL CODE COUNCIL (ICC); DAL CODE COUNCIL (ICC); D BY THE INTERNATIONAL CODE COUNCIL (ICC), EXCEPT THAT THE PROVISIONS OF THE THE INTERNATIONAL CODE COUNCIL (ICC), EXCEPT THAT THE PROVISIONS OF THE TE FOLLOWING OCCUPANCY CLASSIFICATIONS AS DEFINED BY THE INTERNATIONAL THE INTERNATIONAL CODE COUNCIL (ICC); EQUIRING AN INSPECTION BY THE STATE FIRE MARSHAL FOR INITIAL LICENSURE, NFPA 101 ECTION ASSOCIATION (NFPA); NFLICTS WITH: S AND FIXED FIRE EXTINGUISHER SYSTEMS IN TENN. COMP. R. & REGS. 0780-02-1402; N TENN. COMP. R. & REGS. 0780-02-1702. RE PROTECTION ASSOCIATION. BLE DESIGN	GENERAL SHEETSCOVER 1COVERCIVIL DRAWINGSC0.1DEMOC1.1SITE FC2.1GRADC3.1GRADC3.1GRADDEMOLITION DRAWIND1.0OVERD1.1DEMOD1.2DEMOD1.3DEMOD1.4DEMOD2.1EXISTD3.1BUILDARCHITECTURAL DRAGN1.1GENE	PLAN PLAN PLAN PLAN ING PLAN ING PLAN IN	03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25	6 5-22-25 1 5-16-25 1 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25	A2.3 A2.4 A2.5 A2.6 A2.7 A2.8 A2.9 A2.10 A3.01 A3.02 A3.03 A3.05 A3.06 A4.01 A4.02 A4.03 A4.04 A4.05 A4.11 A4.12 A4.13	DOOR SCHEDULE - 1ST AND 2ND FLOORDOOR SCHEDULE - 3RD AND 4TH FLOORWINDOW TYPESEXTERIOR DETAILSDOOR AND WINDOW DETAILSDOOR AND WINDOW DETAILSDOOR AND WINDOW DETAILSFIRE RATED WINDOW DETAILSFIRE RATED WINDOW DETAILSEXTERIOR ELEVATIONSEXTERIOR ELEVATIONSPRECAST PANELS ELEVATIONSCOLUMN AND QUION ELEVATIONSBUILDING SECTIONSBUILDING SECTIONSWALL SECTIONSWALL SECTIONSWALL SECTIONSWALL SECTIONS	03-28-25 03-28-25
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ACTUAL AREAS: 1ST FLOOR: EXISTING 18,944 SF + NEW 2,450 SF + COVERED 1,343 SF = 22,737 SF 2ND FLOOR: EXISTING 17,080 SF + NEW 2,548 SF + COVERED 162 SF = 19,790 SF 3RD FLOOR: EXISTING 17,080 SF + NEW 2,296 SF + COVERED 162 SF = 19,538 SF 4TH FLOOR: EXISTING 14,874 SF + NEW 2,296 SF + COVERED 162 SF = 17,322 SF TOTAL: EXISTING 67,978 SF + NEW 9,590 SF + COVERED 1,829 SF = 79,387 SF	REVISIONS PER CHANGE ORDERS AND SUPPLEMENTAL INSTRUCTIONS TYPE (CO / SI) DATE DESCRIPTION OF WORK ADDENDUM 1 5-16-25 FIRE MARSHAL COMMENTS AND OTHER ITEMS ADDENDUM 2 5-22-25 FIRE MARSHAL COMMENTS	A1.24FINISHA1.31ENLAFA1.32ENLAFA1.41ENLAFA1.51ENLAFA1.61STAIRA1.62STAIR	I PLAN - 4TH FLOOR RGED PLANS RGED PLANS RGED RESTROOM PLANS RGED CLASSROOM PLANS PLANS AND SECTIONS - STAIR A PLANS AND SECTIONS - STAIR B	03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25	4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25 4 5-16-25	A6.08 A6.09 A7.10 A7.20 A7.30 A7.40 A8.01	INTERIOR ELEVATIONS INTERIOR ELEVATIONS REFLECTED CEILING PLANS - FIRST FLOOR REFLECTED CEILING PLAN - SECOND FLOOR REFLECTED CEILING PLAN - THIRD FLOOR REFLECTED CEILING PLAN - FOURTH FLOOR CASEWORK DETAILS	03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25 03-28-25
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(ING WALLS - EXTERIOR (^{f, g})	0	REQUIR	ED BY OCCUPANCY	
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-BEARING WALLS & PARTITIONS (INTERIOR)	0	ROOMS	AND ENCLOSED SPACES	C
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OT LESS THAN THE FIRE-RESISTANCE RATING BA RATION DISTANCE (SEE TABLE 602). IOT LESS THAN THE FIRE-RESISTANCE RATING AS FION 704.10. TABLE 602 - FIRE SEPARATION DISTANCE IS GREA	SED ON FIRE REFERENCED IN TER THAN 30'.			

SBC N⁰ 364/011-04-2022CM

COOKEVILLE, PUTNAM COUNTY, TN

FIRE-RATED SEPARATION NOTES:

REQUIRED SEPARATIONS BETWEEN OCCUPANCIES

REQUIRED SEPARATIONS BETWEEN OCCUPANCIES PER IBC 2012 TABLE 508.4. BETWEEN B AND A-3 (SPRINKLED) - 1 HOUR CORRIDOR SEPARATION (WITH SPRINKLER FOR A AND B OCCUPANCIES): NO

RATING (IBC TABLE 1018.1). WINDOWS IN RATED APPLICATIONS

AUTOMATIC SPECIAL-PURPOSE SPRINKLER SYSTEM USED IN CONJUNCTION WITH FIXED GLAZED WALL ASSEMBLY TO PROVIDE AN ALTERNATIVE TO A TWO-HOUR FIRE-RESISTANCE-RATED NONLOAD-BEARING INTERIOR FIRE BARRIER ASSEMBLY PRESCRIBED IN IBC SECTION 707 PER ICC-ES EVALUATION REPORT ESR-2397. APPLICABLE FOR FIRE BARRIERS AND EXTERIOR WALL FOR UP TO 2-HOUR FIRE-RESISTANCE RATING (ICC-ES ESR-2397 3.1, 5.3).

ATRIUM SPRINKLER PROTECTION

ATRIUM SPACES SHALL BE SEPARATED FROM ADJACENT SPACES BY A 1-HOUR FIRE BARRIER CONSTRUCTED IN ACCORDANCE WITH SECTION 909. (IBC 2012 -404.6)

A FIRE BARRIER IS NOT REQUIRED WHERE A GLASS WALL FORMING A SMOKE PARTITION IS PROVIDED. SPRINKLERS MUST BE PROVIDED ON THE ROOM SIDE ONLY IF THERE IS NO WALKWAY ON THE ATRIUM SIDE OF THE GLASS, GLASS WALLS MUST BE IN A GASKETED FRAME, AND GLASS DOORS SHALL BE SELF-CLOSING. (IBC 404.6 EXCEPTION 1, 1.1-1.3)

SMOKE CONTROL IS NOT REQUIRED FOR ATRIUMS THAT CONNECT ONLY TWO STORIES. (IBC 2012 - 404.5 EXCEPTION). THE THIRD FLOOR OF THE BUILDING IS SEALED OFF FROM THE ATRIUM. THE ATRIUM IS ONLY CONNECTING THE FIRST AND SECOND STORIES.

OPENINGS IN EXTERIOR WALLS

IBC 2012 - 705.8.2 EXCEPTION: OPENING PROTECTIVES ARE NOT REQUIRED WHERE THE BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 AND THE EXTERIOR OPENINGS ARE PROTECTED BY A WATER CURTAIN USING AUTOMATIC SPRINKLES APPROVED FOR THAT USE.

PROJECT SUMMARY STATEMENT

EXISTING BUILDING RENOVATION OF AN EDUCATIONAL FACILITY WITH A TYPE II-B CONSTRUCTION. RENOVATION W ELECTRICAL AND INTERIOR ARCHITECTURAL ELEMENTS. NEW BUILDING ADDITIONS WILL BE ADDED TO INCREASE CII SPACE IN THE BUILDING CORE. PROJECT SCOPE WILL ALSO INCLUDE MINOR LANDSCAPING AND GRADING TO ENHAN

CIVIL ENGINEER

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ASSOCIATED ARCHITECT



STRUCTURAL ENGIN

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COOKEVILLE, TN 3850

Current	Current
Revision	Revision Date
4	5-16-25
4	5-16-25
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4	J-10-23

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A9.01	ALTERNATES	03-28-25		
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A9.03	ALTERNATES	03-28-25		
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	RESPONDING FIRE DEPARTMENT	LOCAL BUILDING INSPECTOR	
/ILL UPDATE OUTDATED MECHANICAL AND RCULATION AND EGRESS AND FREEUP PROGRAM ICE BUILDING FRONTAGE.	COOKEVILLE FIRE DEPARTMENT P.O. BOX 998 - 45 EAST BROAD STREET COOKEVILLE, TN 38503-0998 PHONE: 931-520-5236	COOKEVILLE CITY INSPECTOR - JEREMY GLASCOCK 45 EAST BROAD STREET COOKEVILLE, TN 38501 PHONE: 931-520-5268	

	DESIGN	TEAM	
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AGINIULINE DE 125 OP TENNESS	AGRICULTOR AGRICULTOR OF TEN VENNMMMMM	AGERCULTER AGERCULTER AGERCULTER AGERCULTER OF TENNESS OF TENNESS AGERCULTER OF TENNESS AGERCULTER OF TENNESS AGERCULTER	AGRICULTURE 03/28/2025



THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Types C and SCX UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, WRC, WRX, USGX. USG BORAL DRYWALL SFZ LLC - Types C, SCX, SGX, USGX USG MEXICO S A DE C V — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX System B - 2 Hr Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in two layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Outer or face layer attached to studs with 1-5/8 in. long Type S steel screws spaced 12 in. OC when installed vertically and staggered 12 in. from base laver screws or 8 in. OC when installed horizontally in. from base layer screws. Horizontal joints between inner and outer layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. CGC INC - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Types C and SCX UNITED STATES GYPSUM CO - 1/2 in. Types C, IP-X2, IPC-AR, or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX System C - 2 Hr Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, secured with 1-1/4 in. long Type S steel screws spaced 8 in. OC along vertical edges and in the field when installed vertically or 8 in. OC along the vertical edges and in the field when installed horizontally. Horizontal joints need not be backed by steel framing. Screws along side joints offset 4 in. Requires min 4 in. deep framing per Items 1, 2 and 3. Requires min 3 in, thick mineral wool batts per Item 6 CGC INC - Types IP-X3 or ULTRACODE UNITED STATES GYPSUM CO - Types IP-X3 or ULTRACODE USG BORAL DRYWALL SFZ LLC - Type ULTRACODE USG MEXICO S A DE C V — Types IP-X3 or ULTRACODE System D — 2 Hr ypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick 48 in. or 1200 mm wide, applied vertically or horizontally, attached directly to studs with 1 in. long yps S steel screws spaced 24 in. when installed vertically or 16 in. OC when installed horizontally. Horizontal joints need not be backed by steel framing. Requires face layer of 1/2 or 5/8 in thick cementitious backer units per Item 7 and min 1-1/2 in thick mineral wool batts per Item 6. CGC INC — Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Types C and SCX UNITED STATES GYPSUM CO - Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, ULX, USGX, WRC, WRX. USG BORAL DRYWALL SFZ LLC — Types C, SCX, SGX, USGX USG MEXICO S A DE C V - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX System E — 2 Hr Gypsum panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, attached to studs with 1 in. Iong Type S steel screws spaced 12 in. OC when installed vertically or 8 in. when installed horizontally. Horizontal joints need not be backed by steel framing. CGC INC - 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Types C and SCX UNITED STATES GYPSUM CO — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULIX, USAX, WRC, WRX. USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, USGX USG MEXICO S A DE C V — 1/2 in. Types C, IP-X2, IPC-AR; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX System F — 2 Hr um panels, with beveled, square or tapered edges, nom 1/2 in. or 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically in two layers. Inner or base layer attached to resilient furring channels (Item 2B) with 1 in. long Type S steel screws spaced 24 in. Outer or face layer attached to resilient furring channels (Item 2B) with 1-5/8 in. long Type S steel screws spaced 12 in. OC and staggered 12 in. from base layer screws. Joints between inner and outer layers staggered 24 in. CGC INC - 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO — Types C and SCX UNITED STATES GYPSUM CO — 1/2 in. Type C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, FRX-G, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SGX, SHX, ULX, ULX, USGX, WRC, WRX. USG BORAL DRYWALL SFZ LLC - 1/2 in. Type C: 5/8 in. Types C. SCX USG MEXICO S A DE C V - 1/2 in. Types C, IP-X2, IPC-AR or WRC; 5/8 in. Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULX, USGX, WRC, WRX System G — 3 Hr Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally in three layers. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertical vor 16 in OC when installed horizontally. Middle laver attached to studs with Table to study with the long type 3 sets steps space 24 in. Oc when installed vertically on in Oc when installed horizontally. Note or for long type 4 attached to study with 2-1/4 in. long type 5 step steps steps steps steps steps attached to study with 2-1/4 in. long type 5 steps staggered a min of 12 in. . Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers. CGC INC — Types C, IP-X2, IPC-AR, ULIX, WRC THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Type C UNITED STATES GYPSUM CO - Types C. IP-X2, IPC-AR, ULIX, WRC USG BORAL DRYWALL SFZ LLC - Type C USG MEXICO S A DE C V - Types C, IP-X2, IPC-AR, WRC System H — 3 Hr Gypsum panels, with beveled, square or tapered edges, nom 5/8 in. thick, 48 in. or 1200 mm wide, applied vertically or horizontally, two layers over the flange of the "C" section of the studs, one layer over the flange of the "H" section of the studs. Inner or base layer attached to studs with 1 in. long Type S steel screws spaced 24 in. OC when installed vertically or 16 in. OC when installed horizontally. Face layer attached to studs with 1–5/8 in. long Type S steel screws spaced 16 in. when installed vertically or 12 in. OC when installed horizontally. Screws offset 6 in. from layer below. Horizontal joints on adjacent layers staggered a min of 12 in. Horizontal joints need not be backed by steel framing. Vertical joints centered over studs and staggered 24 in. on adjacent layers. CGC INC - Types C, IP-X2, IPC-AR, ULIX, WRC THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Type C UNITED STATES GYPSUM CO - Types C, IP-X2, IPC-AR, ULIX, WRC USG BORAL DRYWALL SFZ LLC - Type C USG MEXICO S A DE C V - Types C IP-X2 IPC-AR WRC System I — 4 Hr Gypsum panels, with beveled, square or tapered edges, nom 3/4 in. thick, 4 ft wide (or 1200 mm for metric spacing) wallboard with square or tapered edges. Total of four layers to be used. First and second (inner) layers applied vertically or horizontally over the steel studs. Horizontal joints need not be backed by steel framing. When applied vertically, joints centered over studs and staggered min 24 in., otherwise all joints staggered min 12 in. First layer secured to studs with 1-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in. OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in. OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 24 in. OC. Second layer secured to studs with 2-1/4 in. long Type S self-drilling. 12 in. OC. Third layer applied vertically over the furring channels (Item 2C) with a 1-1/4 in. long Type S self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC Fourth layer applied vertically or horizontally with 2-1/4 in. long Type 5 self-drilling, self-tapping bugle-head steel screws spaced 12 in. OC. When applied vertically, joints to be staggered min 24 in. from third layer, otherwise all joints staggered min 12 in. CGC INC — Types IP-X3 or ULTRACODE UNITED STATES GYPSUM CO - Types IP-X3 or ULTRACODE USG BORAL DRYWALL SFZ LLC - Type ULTRACODE USG MEXICO S A DE C V - Types P-X3 or ULTRACODE 4A. Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) - Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9) or Lead Discs or Tabs RAY-BAR ENGINEERING CORP - Type RB-LBG 4B, Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base laver. For direct attachment only) - Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or #6 by 1-1/4 in. long bugle head fine driller) steel screws NEW ENGLAND LEAD BURNING CO INC, DBA NELCO — Type Nelco 4C. Gypsum Board* - (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) - Nom 5/8 or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over 20 MSG steel studs and staggered min 1 stud cavity on opposite sides of studs. See Items 1, 2, 2A, 2B and 2D. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. For Joint Compound see Item 5. To be used with Lead Batten Strips (see Item 9A) or Lead Discs (see Item 10A). Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. MAYCO INDUSTRIES INC — Type X-Ray Shielded Gypsum 4D. Gypsum Board* — (As an alternate to Item 4 Systems A, B, C, D, E, G, H, and I when used as the base layer, For direct attachment only) — Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 steel screws gypsum panel steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 8 ft long with a max thickness of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered over the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the RADIATION PROTECTION PRODUCTS INC - Type RPP - Lead Lined Drywall 5. Joint Tape and Compound — (Not Shown) Systems A, B, C, E, F, G, H, I Joints on outer layers of gypsum boards (Item 4 and 4A) covered with paper tape and joint compound. Paper tape and joint compound may be omitted when gypsum boards are supplied with square edges. Exposed screw heads covered with joint compound. 6. Batts and Blankets* -Systems A, B, E, F, G, H, (Optional) — Mineral wool or glass fiber batts partially or completely filling stud cavity. Any mineral wool or glass fiber batt mineral bearing the UL Classification Marking as to Fire Resistance. Systems C & D Min 3 in, (System C) and min 1-1/2 in, (System D) thick mineral wool batts, friction fitted between the studs and floor and ceiling runners. ROCKWOOL — Type AFB, min. density 1.8 pcf / 28.8 kg/m³ THERMAFIBER/OWENS CORNING - Type SAFB, SAFB FF 7. Cementitious Backer Units* — (System D) — Nom 1/2 or 5/8 in. thick panels, square edge, attached to studs over gypsum wallboard with 1-5/8 in. long. Type S-12, corrosion resistant steel screws spaced 8 in. OC and staggered 8 in. from gypsum wall board screws. Joints covered with glass fiber mesh tape. Vertical joints staggered one stud cavity from gypsum wallboard joints. Horizontal joints staggered a min of 12 in. from the gypsum wallboard joints. UNITED STATES GYPSUM CO - Type DCB 8. Laminating Adhesive* — (Optional, Not Shown) — Used to bond outer layer of Cementitious Backer Units (Item 7) to inner layers of Gypsum Board (Item 4) in System D. ANSI A136.1 Type 1 organic adhesive applied with 1/4 in. square notched trowel. See Adhesives (BYWR) in the Fire Resistance Directory or Adhesives (BJLZ) in the Building Materials Directory for names of Classified companies. 9. Lead Batten Strips — (Not Shown, For Use With Item 4A) — Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. Strips placed on the interior face of studs and attached from the exterior face of the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4A) and optional at remaining stud locations. Required behind vertical joints. 9A. Lead Batten Strips — (Not Shown, for use with Item 4C) — Lead batten strips, 2 in, wide, max 10 ft long with a max thickness of 0.140 in, Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min. 1 in. long min. Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".. Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 6) and optional at remaining stud locations. 10. Lead Discs or Tabs — (Not Shown, For Use With Item 4A) — Used in lieu of or in addition to the lead batten strips (Item 9) or optional at other locations x 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards (Item 4A) underneath screw locations prior to the installation of the screws. Lead discs or tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". 10A. Lead Discs — (Not Shown, for use with Item 4C) — Max 5/16 in. diam by max 0.140 in. thick lead discs compression fitted or adhered over steel screw heads. Lead discs to have a purity of 99.5% meeting the Federal Specification QQ-L-201f, Grades "B, C or D". 1. Lead Batten Strips — (Not Shown, For Use With Item 4B) — Lead batten strips, 2 in, wide, max 10 ft long with a max thickness of 0.142 in. Strips placed on the face of studs and attached to the stud with two min. 1 in. long min. Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip or with one min, 1 in, long min, Type S-8 pan head steel screw at the top of the strip. Lead batten strips to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead batten strips required behind vertical joints of lead backed gypsum wallboard (Item 4B) and optional at remaining stud locations. 12. Lead Tabs - (Not Shown, For Use With Item 4B) - 2 in. wide, 5 in. long with a max thickness of 0.142 in. Tabs friction-fit around front face of stud, the stud folded back flange, and the back face of the stud. Tabs required at each location where a screw (that secures the gypsum boards, Item 4B) will penetrate the steel stud. Lead tabs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Lead tabs may be held in place with standard adhesive tape if necessary.

Last Updated on 2022-02-14

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada),

respectively.

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1A. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2B, proprietary channel shaped runners, 3-5/8 in. deep attached to floor and ceiling with fasteners 24 in. OC max. CEMCO, LLC — Viper25™ Track CRACO MFG INC — SmartTrack25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper25TM Track IMPERIAL MANUFACTURING GROUP INC - Viper25TM Track

18. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2C, proprietary channel shaped runners, 1-1/4 in, wide by 3-5/8 in, deep fabricated from min 0.018 in, thick galv steel, attached to floor and ceiling with fasteners spaced 24 in, OC max. CEMCO, LLC — Viper20™ Track MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20TM Track IMPERIAL MANUFACTURING GROUP INC — Viper20[™] Track

Floor and Ceiling Runners — (Not Shown) — For use with Item 2 — Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth

1C. Framing Members* — Floor and Ceiling Runners — (Not Shown) — In lieu of Item 1 — Channel shaped, attached to floor and ceiling with fasteners 24 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

to accommodate stud size, with min 1-1/4 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max.

1D. Floor and Ceiling Runners - (Not Shown) - For use with Item 2A - 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. 1E. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2E, 5F or 5G or 5G or 5J only, channel shaped, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max. CLARKDIETRICH BUILDING SYSTEMS - CD ProTRAK DMFCWBS L L C - ProTRAK

MBA METAL FRAMING - ProTRAK RAM SALES L L C - Ram ProTRAK STEEL STRUCTURAL PRODUCTS L L C - Tri-S ProTRAK

1F. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2F, proprietary channel shaped runner minimum width to accommodate stud size, with 1- 1/8 in. long legs fabricated from min 0.015 in. (min bare metal thickness) galv steel, attached to floor and eiling with fasteners spaced 24 in. OC max. SUPER STUD BUILDING PRODUCTS — The Edge

1G. Framing Members* — Floor and Ceiling Runner — For use with Item 2G, proprietary channel shaped runners, minimum width to accommodate stud e attached to floor and ceiling with fasteners 24 in. OC ma 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 . long legs, for use with studs specified below and fabricated from min 0.018 in. galv steel or thicker, attached to floor and ceiling with fasteners spaced max MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper20TM Track VT100 IMPERIAL MANUFACTURING GROUP INC - Viper20[™] Track VT100

1]. Framing Members* — Floor and Ceiling Runners — (Not Shown, As an alternate to Item 1) — For use with Items 2H, channel shaped, fabricated from min bare metal thickness) galvanized steel, attached to floor and ceiling with fasteners 24 in. OC. max. TELLING INDUSTRIES L L C - TRUE-TRACK"

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

1M. Framing Members* — Floor and Ceiling Runners — Not Shown — As an alternate to Item 1 — For use with Item 2O, proprietary channel shaped rs, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. RONDO BUILDING SERVICES PTY LTD - Rondo Wall Track

1N. Framing Members* — Floor and Ceiling Runners — Not Shown — As an alternate to Item 1 — For use with Item 2P, proprietary channel shaped ers, min width to accommodate stud size, galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max. OEG BUILDING MATERIALS - OEG Track

10. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2Q, proprietary channel shaped runners, min idth to accommodate stud size, fabricated from min. 25 MSG (0.018 in. min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in CEMCO, LLC — Viper X Track 1P. Framing Members* — Floor and Ceiling Runner — (Not Shown — Alternate to Item 1) — For use with Item 2R, 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 celling with fasteners 24 in. OC max.

HYPERFRAME INC - Hypertrack 1Q. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 25, proprietary channel shaped runners, min width to accommodate stud size, 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". 1R. Framing Members* — Floor and Ceiling Runner — Not Shown — In lieu of Item 1 — For use with Item 2T, proprietary channel shaped runners, min width to accommodate stud size, fabricated from min. 25 MSG (0.018 in. min. bare metal thickness), attached to floor and ceiling with fasteners spaced 24 in. OC max IRONLINE METALS LLC — Bantam Track.

2. Steel Studs - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. 2A. Steel Studs — (As an alternate to Item 2, For use with Items 5B, 5E, 5H, 5J or Type ULIX) — Channel shaped, fabricated from min 20 MSG corrosionprotected 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. 28. Framing Members* - Steel Studs — (As an alternate to Item 2, For use with Items 5C, 5I or Type ULIX) — Proprietary channel shaped studs, 3-5/8 in. deep spaced a max of 24 in. OC. Studs to be cut 3/4 in less than the assembly height and installed with a 1/2 in. gap between the end of the stud and track at the bottom of the wall. For direct attachment of gypsum board only. CEMCO, LLC — Viper25™ CRACO MFG INC — SmartStud25™

MARINO/WARE, DIV OF WARE INDUSTRIES INC - Viper25™ MPERIAL MANUFACTURING GROUP INC - Viper25™

2C. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max if 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights. CEMCO, LLC — Viper20™ MARINO/WARE, DIV OF WARE INDUSTRIES INC --- Viper20** IMPERIAL MANUFACTURING GROUP INC - Viper20⁷⁴

2D. Framing Members* — Steel Studs — In lieu of Item 2 — Channel shaped studs, min depth as indicated under Item 5, 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 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

studs, min depth as indicated under Item 5F, 5G or 5I, fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. CLARKDIETRICH BUILDING SYSTEMS - 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

2F. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped steel studs, minimum width indicated under Item 5, deep fabricated from min 0.015 in. (min bare metal thickness) galvanized steel. Studs 3/8 in. to 3/4 in. less in lengths than assembly heights. SUPER STUD BUILDING PRODUCTS - The Edge

2G. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped studs, minimum width indicated under Item 5, Studs to be cut 3/8 to 3/4 in less than the assembly height. **STUDCO BUILDING SYSTEMS —** CROCSTUD

2H. Framing Members* — Steel Studs — (Not Shown, As an alternate to Item 2) — Fabricated from min. 0.015 in. (min bare metal thickness) galvanized steel, spaced a max of 24 in. OC. Studs to be cut 3/4 in. less than assembly height. TELLING INDUSTRIES L L C — TRUE-STUD™

2I. Framing Members* — Steel Studs —

2). Framing Members* — Metal Studs — Not Shown — In lieu of Item 2 — proprietary channel shaped steel studs, min depth as indicated under Item 5. spaced a max if 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights 2K. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosionprotected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. EB METAL INC - NITROSTUD

2L. Framing Members* - Steel Studs - As an alternate to Item 2 - For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosionprotected steel, min depth as indicated under Item 5, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. OLMAR SUPPLY INC — PRIMESTUD

2M. Framing Members* — Steel Studs — As an alternate to Item 2 — For use with Item 1, channel shaped studs, fabricated from min 25 MSG corrosionsteel, min depth as indicated under Item 5, 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**

2N. Framing Members*- Steel Studs - As an alternate to Item 2 - proprietary channel shaped steel studs, min depth 3-1/2 in. and as indicated under spaced a max of 24 in. OC, fabricated from min 0.018 in. thick galv steel. Studs cut 3/8 in. to 3/4 in. less in length than assembly height. RESCUE METAL FRAMING, L L C - AlphaSTUD

20. Framing Members* — Steel Studs — As an alternate to Item 2 — proprietary channel shaped steel studs, min width as indicated under Item 5, galv steel. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height. Spaced 24 in. OC max. RONDO BUILDING SERVICES PTY LTD — Rondo Lipped Wall Stud

2P. Framing Members* — Steel Studs — As an alternate to Item 2 — proprietary channel shaped steel studs, min width as indicated under Item 5, min 25 MSG galv steel. Studs to be cut 3/8 to 3/4 in. less in lengths than assembly height. Spaced 24 in. OC max. OEG BUILDING MATERIALS — OEG Stud

2Q. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 10, proprietary channel shaped steel studs, min depth as indicated under Item 5, spaced a max of 24 in, OC, fabricated from min 25 MSG (0.018 in, min, bare metal thickness). Studs cut 3/8 in, to 3/4 in, less in lengths than assembly heights. CEMCO, LLC - Viper X

2R. Framing Members* — Steel Studs — (Not Shown — Alternate to Item 2, For use with Item 1P) — Channel shaped steel studs with attachment clips at top and bottom, min 3-5/8 in. depth, spaced a max of 24 in. OC. Studs dipped into floor and ceiling runners (Item 1P). Max 2-3/8 in. extension reveal from top of stud to inside of ceiling HYPERFRAME INC- Hyperstud

25. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1Q, proprietary channel shaped steel studs, min depth as indicated under tem 5, spaced a max of 24 in. OC, fabricated from min. 20 EQ/22 mils. (min. 0.0221 in. thick) galvanized steel. Studs cut 3/8 in. to 3/4 in. less in lengths than assembly JJC INTERNATIONAL DISTRIBUTORS — Non-structural Studs 3-5/8" and 6".

2T. Framing Members* — Steel Studs — Not Shown — In lieu of Item 2 — For use with Item 1R, proprietary channel shaped steelstuds, min depth as indicated under Item 5, spaced a max of 24 in. OC, fabricated from min 25 MSG (0.018 in. min. bare metal thickness). Studs cut 3/8 in. to 3/4 in. less in lengths than assembly heights. RONLINE METALS LLC — Bantam Stud.

3. Wood Structural Panel Sheathing — (Optional, For use with Item 5 Only) — (Not Shown) — 4 ft wide, 7/16 in. thick oriented strand board (OSB) or 15/32 in. thick structural 1 sheathing (plywood) complying with DOC PS1 or PS2, or APA Standard PRP-108, manufactured with exterior glue, applied horizontally or vertically to the steel studs. Vertical joints centered on studs, and staggered one stud space from wallboard joints. Attached to studs with flat-head selfdrilling tapping screws with a min. head diam. of 0.292 in. at maximum 6 in. OC. in the perimeter and 12 in. OC. in the field. When used, gypsum panels attached over OSB or plywood panels and fastener lengths for gypsum panels increased by min. 1/2 in. 4. Batts and Blankets* — (Required as indicated under Item 5) — Mineral wool batts, friction fitted between studs and runners. Min nom thickness as See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

4A. Batts and Blankets* — (Optional – as an alternate to item 4) — Placed in stud cavities, any glass fiber or mineral wool insulation bearing the UL Cassification Marking as to Surface Burning Characteristics and/or Fire Resistance See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies 4B. Fiber, Sprayed* — (Optional – as an alternate for items 4 or 4A, for use with Type ULIX) Where insulation is required - Spray applied granulated mineral fiber material. The fiber is applied with adhesive at a minimum density of 4.0 pcf to completely fill the wall cavity in accordance with the application ns supplied with the product. See Fiber, Sprayed (CCAZ).

4C. Foamed Plastic* — (As an alternate for items 4, 4A or 4B, for use with Item 5K) — Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity, for 2 hour rated assemblies only. When foamed plastic is used, minimum stud depth shall be 3-1/2 in. with minimum 20 MSG steel 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

4D. Foamed Plastic* - (As an alternate for items 4, 4A or 4B, for use with Item 5K) - Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity, for up to 2 hour rated assemblies only. When foamed plastic is used, minimum stud depth shall be 3-1/2 in. with minimum 20 MSG steel BASE CORP - Enertite® NM, Enertite® G, FE178®, Spravtite® 178, Spravtite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, Walltite HP+, FE137®, FE158®, Spraytite® 158, Spraytite® SP, Spraytite® 81205, Spraytite® Comfort XL, Walltite® XL, Walltite® MAX, Walltite® LWP, Walltite® Plus and Enertite® Max

5. Gypsum Board* — Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) staggered a min of 12 in. Horizontal edge joints and horizontal butt joints in adjacent layers (multilayer systems) with Type ULIX need not be staggered. The thickness and number of layers for the 1 hr, 2 hr, 3 hr and 4 hr ratings are as follows:

AMERICAN ROCKWOOL MANUFACTURING, LLC - Type Rockwool Premium Plus

10 200	Gypsum Board Protection on Each Side of Wa				
Rating, Hr	Min Stud Depth, in. Items 2, 2C, 2D, 2F, 2G, 2O	No. of Layers & Thkns of Panel	Min Thkns Insulat (Item		
1	3-1/2	1 layer, 5/8 in. thick	Optional		
1	2-1/2	1 layer, 1/2 in. thick	1-1/2 in.		
1	1-5/8	1 layer, 3/4 in. thick	Optional		
2	1-5/8	2 layers, 1/2 in. thick	Optional		
2	1-5/8	2 layers, 5/8 in. thick	Optional		
2	3-1/2	1 layer, 3/4 in. thick	3 in.		
3	1-5/8	3 Jayers, 1/2 in. thick	Optional		
3	1-5/8	2 layers, 3/4 in. thick	Optional		
3	1-5/8	3 layers, 5/8 in. thick	Optional		
4	1-5/8	4 layers, 5/8 in. thick	Optional		
4	1-5/8	4 layers, 1/2 in. thick	Optional		

2-1/2 2 layers, 3/4 in. thick CGC INC — 1/2 in: thick Type C, IP-X2 or IPC-AR; WRC, 5/8 in: thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, ULD, WRX or WRC; 3/4 in: thick Types IP-X3 or

THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - 1/2 in. thick Type C and 5/8 in. thick Type SCX UNITED STATES GYPSUM CO — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type SCX, SGX, SHX, ULIX, WRX, IP-X1, AR, C, WRC, FRX-G, IP-AR, IP-X2, IPC-AR; 3/4 in. thick Types P-X3 or ULTRACODE

USG BORAL DRYWALL SFZ LLC — 1/2 in. Type C; 5/8 in. Types C, SCX, SGX, ULTRACODE USG MEXICO S A DE C V — 1/2 in. thick Type C, IP-X2, IPC-AR or WRC; 5/8 in. thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRX, WRC or; 3/4 in. thick Types IP-X3 or ULTRACODE

When Item 78, Steel Framing Members*, is used, Nonbearing Wall Rating is limited to 1 Hr. Min. stud depth is 3-1/2 in., min. thickness of insulation (Item 4) is 3 in., and two layers of gypsum board panels (1/2 in. or 5/8 in. thick) shall be attached to furring channels as described in Item 6. One layer of gypsum board panels (1/2 in. or 5/8 in. thick) attached to opposite side of stud without furring channels as described in Item 6. 5A. Gypsum Board* — (As an alternate to Item 5) — 5/8 in. thick, 24 to 54 in. wide, applied horizontally as the outer layer to one side of the assembly.

Secured as described in Item 6. CGC INC — Type SHX. UNITED STATES GYPSUM CO - Type FRX-G, SHX. USG MEXICO S A DE C V - Type SHX.

5B. Gypsum Board* --- (Not Shown) --- As an alternate to Item 5 when used as the base layer on one or both sides of wall when 5/8 in or 3/4 in, thick products are specified. For direct attachment only to steel studs Item 2A, (not to be used with Item 3) — Nom 5/8 in. or 3/4 in. may be used as alternate to all 5/8 in. or 3/4 in. shown in Item 5, Wallboard Protection on Each Side of Wall table. Nom 5/8 in. or 3/4 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Gypsum board secured to 20 MSG steel studs Item 2A with 1-1/4 in. long Type S-12 steel screws spaced 8 in. OC at perimeter and 12 in. OC in the field. To be used with Lead ten Strips (see Item 11) or Lead Discs or Tabs (see Item 12). RAY-BAR ENGINEERING CORP - Type RB-LBG

5C. Gypsum Board* — (For Use With Item 2B) — Rating Limited to 1 Hour. 5/8 in. thick, 48 in. wide, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally. (Vertical Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type S coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. Vertical joints are to be centered over studs and staggered one stud cavity on opposite sides of studs. (Horizontal Application) - The gypsum board is to be installed on each side of the studs with 1 in. long Type 5 coated steel screws spaced 8 in. OC starting 4 in. from the edge of the board at the vertical edges and 12 in. OC starting 6 in. from the edge of the board at the center of each board. Gypsum boards are to be secured to the top and bottom track with screws spaced 8 in. OC starting 4 in. from the board edge. Fasteners shall not penetrate through both the stud and the track at the same time. All horizontal joints are to be backed as outlined under section VI of Volume 1 in the Fire Resistive Directory. CGC INC - Type SCX, ULIX. THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Type SCX UNITED STATES GYPSUM CO — Type SCX, SGX, ULIX. USG BORAL DRYWALL SFZ LLC — Type SCX

USG MEXICO S A DE C V - Type SCX 5D. Gypsum Board* — (As an alternate to Item 5) — 5/8 in. thick, 48 in. wide, applied vertically or horizontally. Secured as described in Item 6. For use with

CGC INC - Type USGX UNITED STATES GYPSUM CO - Type USGX USG BORAL DRYWALL SFZ LLC - Type USGX USG MEXICO S A DE C V - Type USGX

5E. Gypsum Board* — (Not Shown) — (As an alternate to Item 5 when used as the base layer on one or both sides of wall when 1/2 in. or 5/8 in thick products are specified, For direct attachment only to steel studs Item 2A, not to be used with Item 3). Nominal 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-1/4 in. long Type S-12 (or No. 6 by 1-1/4 in. long bugle head fine driller) steel screws spaced 8 in. OC at perimeter and 12 in. OC in NEW ENGLAND LEAD BURNING CO INC, DBA NELCO - Nelco

tapered edges, applied vertically, and fastened to the steel studs with 1 in. long Type S screws spaced 8 in. OC along vertical and bottom edges and 12 in. OC n the field. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Steel stud depth shall be a minimum 3-5/8 in. THE SIAM GYPSUM INDUSTRY (SONGKHLA) CO - Type SCX UNITED STATES GYPSUM CO - 5/8 in. thick Type SCX, SGX, ULIX USG BORAL DRYWALL SFZ LLC - 5/8 in. thick Type SCX, SGX

5G. Gypsum Board* — (As an alternate to Item 5) — For use with Items 1E and 2E only, Gypsum panels with beveled, square or tapered edges, applied vertically or horizontally, as specified in the table below and fastened to the steel studs as described in Item 6. Vertical joints centered over studs and staggered one stud cavity on opposite sides of studs. Vertical joints in adjacent layers (multilayer systems) staggered one stud cavity. Horizontal joints need



USG MEXICO S A DE C V — 1/2 in: thick Type C, IP-X2, IPC-AR or; 5/8 in: thick Type AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, or; 3/4 in: thick Types IP-X3 or ULTRACODE















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104X58 SCREEN

- 104X58 SCREEN

CEILING OPEN TO STRUCTURE ABOVE; FIXTURES, DUCTWORK & CEILING ACCESSORIES HUNG FROM ABOVE.

- CEILING HUNG PRIVACY CURTAIN. COORDINATE WITH SPECIFICATIONS. HOLD GYPSUM BOARD CEILING TIGHT TO UNDERSIDE OF STRUCTURE.
- F. LED OVAL TICKERTAPE SUSPENDED FROM CEILING.
- CEILING OPEN TO EXISTING STRUCTURE, PAINTED PER FINISH SCHEDULE. NEW SLOPED 1/2" GYPSUM BOARD ON 1 1/2" METAL HAT CHANNELS @ 16" O.C. COORD. W/ M,P, & E WORK AND FIELD VERIFY EXISTING CONDITIONS. MMMM MMMMM
- GYPSUM BOARD AT BOTTOM OF STAIRS BETWEEN STAIR STRINGERS. DECORATIVE LIGHTING - ELEVATION OFF F.F.E. VARIES - COORDINATE WITH ELECTRICAL DRAWINGS AND INTERIOR ELEVATIONS.
- SPRINKLER WALL WASH HEADS PER ICC-ES ESR-2397. COORDINATE WITH FIRE PROTECTION DRAWINGS.
- PROVIDE PREFINISHED PERIMETER 11/A7.20)UND ACOUSTIC CEILING CLOUD PER SPECIFICATIONS AND DETAIL
- PROVIDE POWER AND CONTROL CONNECTIONS FOR CEILING HUNG PROJECTOR SCREEN. PROJECTOR PROVIDED BY OWNER. 0. WINDOW SHADE- MOUNT TO EXISTING STRUCTURE ABOVE WINDOW
- DUAL BLACKOUT WINDOW SHADE- MOUNT TO EXISTING STRUCTURE ABOVE

Q. 2" EXPANSION JOINT CEILING COVER



	LEGEND O	F SYMBOLS	2
	2' x 2' LAY-IN CEILING GRID	Ø	RECESSED LUMINAIRE
		×	SURFACE MOUNT OR S
	2' x 2' LAY-IN CEILING GRID W/ 4" ACOUSTICAL CEILING EDGE TRIM -		WALL MOUNTED VANI
	SEE SPEC SECTION 09 53 00		WALL MOUNTED LINE
	GYPSUM BOARD CEILING	₹ €	EXIT SIGN - SINGLE OF OR CLG. MOUNTED, C ELECTRICAL DRAWING
	CLG OPEN TO EXIST. TECTUM STRUCT. DECK TO REMAIN EXPOSED		ARROWS SHALL BE PR SIGN SHALL BE ON TH OF THE GENERATOR F LOSS OF NORMAL BUII
0	2' x 4' RECESSED LIGHT FIXTURE	\bowtie	SUPPLY DIFFUSER
0	2' × 2' RECESSED LIGHT FIXTURE	EF	EXHAUST FAN
0	2' x 4' RECESSED LIGHT FIXTURE - EMERGENCY		RETURN GRILLE
		EH	ELECTRIC HEATER
	2' x 2' RECESSED LIGHT FIXTURE - EMERGENCY	\sim	OCCUPANCY SENSOR
\searrow	1' x 4' SURFACE MOUNT OR SUSPENDED LIGHT FIXTURE	\sim	SMOKE DETECTOR (CE
\searrow	2' X 4' SURFACE MOUNT OR SUSPENDED LIGHT FIXTURE		

GENERAL NOTES

- LIGHTS, HVAC DIFFUSERS AND EXHAUST VENTS ARE SHOWN FOR REFERENCE ONLY AND MAY NOT BE ALL INCLUSIVE. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS. REFER TO FP1.1 THROUGH FP1.5 FOR SPRINKLER HEAD LOCATIONS. SPRINKLER
- HEADS ARE TO BE CENTERED WITHIN CEILING TILES TYPICAL.
- 3. PROVIDE ROLLER SHADES AT WINDOWS AS NOTED ON PLANS.

KEY NOTES

- A. GYPSUM BOARD FURRDOWN. COORDINATE WITH REFLECTED CEILING PLANS FOR HEIGHTS.
- B. CEILING OPEN TO STRUCTURE ABOVE; FIXTURES, DUCTWORK & CEILING ACCESSORIES HUNG FROM ABOVE.
- C. CENTER FIXTURE IN ROOM.
- D. CEILING HUNG PRIVACY CURTAIN. COORDINATE WITH SPECIFICATIONS.
 E. HOLD GYPSUM BOARD CEILING TIGHT TO UNDERSIDE OF STRUCTURE. COORDINATE WITH ELECTRICAL DRAWINGS FOR FIXTURES.
- F. LED OVAL TICKERTAPE SUSPENDED FROM CEILING.
- G. CEILING OPEN TO EXISTING STRUCTURE, PAINTED PER FINISH SCHEDULE. H. NEW SLOPED 1/2" GYPSUM BOARD ON 1 1/2" METAL HAT CHANNELS @ 16"
- O.C. COORD. W/ M,P, & E WORK AND FIELD VERIFY EXISTING CONDITIONS.
 I. GYPSUM BOARD AT BOTTOM OF STAIRS BETWEEN STAIR STRINGERS.
- DECORATIVE LIGHTING ELEVATION OFF F.F.E. VARIES COORDINATE WITH ELECTRICAL DRAWINGS AND INTERIOR ELEVATIONS.
- SPRINKLER WALL WASH HEADS PER ICC-ES ESR-2397. COORDINATE WITH FIRE PROTECTION DRAWINGS.
- PROVIDE PREFINISHED PERIMETER 1[°]I/A7.20)UND ACOUSTIC CEILING CLOUD PER SPECIFICATIONS AND DETAIL
- M. PROVIDE J-BOX AT CEILING WITH POWER/DATA FOR OWNER PROVIDED PROJECTOR.
- N. PROVIDE POWER AND CONTROL CONNECTIONS FOR CEILING HUNG
- PROJECTOR SCREEN. PROJECTOR PROVIDED BY OWNER.
- O. WINDOW SHADE- MOUNT TO EXISTING STRUCTURE ABOVE WINDOWP. DUAL BLACKOUT WINDOW SHADE- MOUNT TO EXISTING STRUCTURE ABOVE
- Q. 2" EXPANSION JOINT CEILING COVER

RATED WALL SYMBOL LEGEND

1-HOUR FIRE BARRIER

FLOOR TO UNDERSIDE OF DECK ABOVE AT CONC. BLOCK LOCATIONS (SEE FLOOR PLANS) USE UL DESIGN U905 (NONBEARING) AND UL DESIGN U905 (LOAD BEARING), TERMINATE AT METAL DECK WITH UL SYSTEMS HW-D-0022 (WALL PERPENDICULAR TO DECK) OR HW-D-0030 (WALL PARALLEL TO DECK FLUTES)

AT GYPSUM BOARD WALL LOCATIONS (SEE FLOOR PLANS) USE UL DESIGN U419 WITH; TERMINATE AT METAL DECK WITH UL SYSTEM HW-D-0024 (WALL PERPENDICULAR TO DECK FLUTES) OR HW-D-0029 (WALL PARALLEL TO DECK FLUTES)

2-HOUR FIRE BARRIER

FLOOR TO UNDERSIDE OF DECK ABOVE AT CONC. BLOCK LOCATIONS (SEE FLOOR PLANS) USE UL DESIGN U905 (NONBEARING) AND UL DESIGN U905 (LOAD BEARING), TERMINATE AT METAL DECK WITH UL SYSTEMS HW-D-0022 (WALL PERPENDICULAR TO DECK FLUTES) OR HW-D-0030 (WALL PARALLEL TO DECK FLUTES)

AT GYPSUM BOARD WALL LOCATIONS (SEE FLOOR PLANS) USE UL DESIGN U419 WITH; TERMINATE AT METAL DECK WITH UL SYSTEM HW-D-0024 (WALL PERPENDICULAR TO DECK FLUTES) OR HW-D-0029 (WALL PARALLEL TO DECK FLUTES)

SHAFT WALL - PER IBC 2012-SECTION 713.2 USE UL DESIGN U415, TERMINATE AT METAL DECK WITH UL SYSTEMS HW-D-0549 (FLOOR OR ROOF DECK WITH FLUTES) OR HW-D-0480 (FLOOR OR ROOF DECK WITHOUT FLUTES)

SMOKE PARTITION PER IBC 2012 SECTION 710 AND NFPA 8.3.4.2, WALL SHALL EXTEND TO DECK.

NOTES:

ALL INTERIOR WALLS SHALL EXTEND TO DECK ABOVE UNLESS NOTED OTHERWISE. PROVIDE 3" HIGH, BRIGHT RED STENCILED LETTERS VISIBLE ABOVE CEILING AT ALL CHANGES IN DIRECTION AND AT 30' INTERVALS ALONG ALL RATED WALLS READING! " HOUR FIRE

IN DIRECTION AND AT 30' INTERVALS ALONG ALL RATED WALLS READING: " ____ HOUR FIRE AND SMOKE BARRIER - PROTECT ALL OPENINGS." (INCORPORATE CORRECT WALL DESIGNATIONS) FIRE WALLS SHALL BE STENCILED ON BOTH SIDES OF WALLS.





