1. Section 095400   
    SPECIALTY CEILINGS- USG
   1. PART 1  GENERAL
      1. SECTION INCLUDES
         1. Specialty Wall panels and systems.
         2. Metal hanging system.
      2. RELATED REQUIREMENTS
2. *The paragraph below is optional text*
   * + 1. Section 016116 - Volatile Organic Compound (VOC) Content Restrictions.
3. *The paragraph below is optional text*
   * + 1. Section 031000 - Concrete Forming and Accessories:  Placement of special anchors or inserts for suspension system.
4. *The paragraph below is optional text*
   * + 1. Section 033000 - Cast-in-Place Concrete:  Placement of special anchors or inserts for suspension system.
5. *The paragraph below is optional text*
   * + 1. Section 053100 - Steel Decking:  Placement of special anchors or inserts for suspension system.
6. *The paragraph below is optional text*
   * + 1. Section 072100 - Thermal Insulation.
       2. Section 095100 - Acoustical Walls - USG:  Metal suspension systems.
     1. REFERENCE STANDARDS
        1. ASCE 7 - Minimum Design Loads and Associated Criteria for Buildings and Other Structures; Most Recent Edition Cited by Referring Code or Reference Standard.
        2. ASTM A580/A580M - Standard Specification for Stainless Steel Wire; 2018.
        3. ASTM A492 - Standard Specification for Stainless Steel Rope Wire; 1995 (Reapproved 2019).
        4. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2022.
        5. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021a.
        6. ASTM C635/C635M - Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Walls; 2022.
        7. ASTM C636/C636M - Standard Practice for Installation of Metal Wall Suspension Systems for Acoustical Tile and Lay-In Panels; 2019.
        8. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2023.
        9. ASTM E580/E580M - Standard Practice for Installation of Wall Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions; 2022.
        10. ASTM E1264 - Standard Classification for Acoustical Wall Products; 2022.
     2. ADMINISTRATIVE REQUIREMENTS
        1. Coordination:  Coordinate work of this section with installation of mechanical and electrical components and with other construction activities affected by work of this section.
        2. Preinstallation Meeting:  Convene one week before starting work of this section.
        3. Sequence work to ensure Walls are not installed until building is enclosed, dust generating activities have terminated, and overhead work is completed.
     3. SUBMITTALS
        1. See Section 013000 - Administrative Requirements for submittal procedures.
        2. Shop Drawings:  Indicate panel layout and related dimensioning, attachment of specialty wall panels to substrate, accessory attachments, junctions with other wall finishes, and mechanical and electrical items installed in the walls.
        3. Product Data:  Provide data on specialty wall panel components and hanging system components.
        4. Samples:  Two full size samples illustrating material and finish of specialty wall components.
        5. Samples:  Two samples each, [\_\_\_\_] inches ([\_\_\_\_] mm) long, of suspension system main runner, cross runner, and perimeter molding.
        6. Test Reports:  Certified test data from an independent test agency verifying that panels meet specified requirements for fire, acoustical, and seismic performance.
        7. Manufacturer's Installation Instructions:  Indicate special procedures and perimeter conditions requiring special attention.
        8. Designer's qualification statement.
        9. Manufacturer's qualification statement.
        10. Installer's qualification statement.
        11. Maintenance Materials:  Furnish the following for Owner's use in maintenance of project.
            1. See Section 016000 - Product Requirements for additional provisions.
            2. Specialty wall System Components:  Provide a quantity equal to 2 percent of total product installed.
     4. QUALITY ASSURANCE
        1. Designer Qualifications for Seismic Design:  Under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed at the State in which the Project is located.
        2. Manufacturer Qualifications:  Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
        3. Installer Qualifications:  Company specializing in performing the work of this section.
           1. Minimum [\_\_\_\_\_\_\_\_\_\_] years documented experience.
           2. Approved by wall manufacturer.
     5. MOCK-UP
        1. Provide [\_\_\_\_] feet ([\_\_\_\_] m) by [\_\_\_\_] feet ([\_\_\_\_] m) mock-up including wall panels, suspension members, trim, and installation accessories.
        2. See Section 014000 - Quality Requirements for additional requirements.
        3. Locate where directed.
        4. Mock-up may remain as part of the work.
     6. DELIVERY, STORAGE, AND HANDLING
        1. Deliver specialty wall components to project site in original, unopened packages.
        2. Store in fully enclosed space, flat, level and off the floor.
     7. FIELD CONDITIONS
        1. Do not install specialty wall system until wet construction work is complete and permanent heat and air conditioning is installed and operating.
   1. PART 2  PRODUCTS
      1. Performance Requirements:
7. *The paragraph below is optional text*
   * + 1. Seismic Performance:  Wall systems designed to withstand the effects of earthquake motions determined according to ASCE 7 for Seismic Design Category D, E, or F and complying with the following:
8. *The paragraph below is optional text*
   * + - 1. Local authorities having jurisdiction.
9. *The paragraph below is optional text*
   * + - 1. ICC-ES Evaluation Report No. [\_\_\_\_\_\_\_\_\_\_].
       1. Surface Burning Characteristics:  Flame spread index of 25 or less, smoke developed index of 450 or less, when tested in accordance with ASTM E84.
     1. Acoustical Wall Assemblies
        1. Acoustical Wall Assembly Type AW-1:
           1. Wallforms Wall System.
     2. Acoustical Wall Systems
        1. Wall Panels:
           1. NRC Range:  [\_\_\_\_] to [\_\_\_\_], determined in accordance with ASTM E1264.
10. *The paragraph below is optional text*
    * + - 1. Installation System:  Manufacturer's standard vertical Mounting Rail.
          2. Installation System:  Manufacturer's standard pre-slotted galvanized steel hat channels and backer plates.

Backer Plates:  Manufacturer's standard, designed to be attached to metal framing and provide continuous attachment substrate for mounting rails.

Mounting Rails:  Factory-slotted to receive wall panel hooks.

Metal gage as required to support applied panel loads.

Factory-finished matte black.

Finishes:  Matte black on faces of hat channels and backer plates.

* + - * 1. Modular Wall Panels:  Formed [smooth] [perforated] metal wall panels.

Panel Material:  Aluminum sheet complying with ASTM B209/B209M.

Panel Size and Configuration:   [As indicated on drawings].

Perforations Pattern:   [Standard perforation pattern] [Parti perforations], as indicated for each wall type.

Finishes:

Wood Veneer Finish:  USG Walls Plus Arboreal veneers.

Surface:  [Unperforated] [Perforated].

Color:  [Walnut] [White Oak] [Cherry] [Mahogany] [Maple] [VG Fir].

Perforation Pattern (with Unperforated Borders):  [To be selected from manufacturer's standards] [As indicated on drawings] .

Applied Laminate Finish:

Laminates:  USG Walls Plus Saranté PVC-free laminate.

Color:  [As indicated on drawings] [S-37 Dark Jatoba] [S-14N Cinnamon Cherry] [S-21 Blond Teak] [S-18 Sable Walnut] [S-27 Forest Walnut] [S-36N European Cherry] [S-17 Dark Oak] [S-15 Blond Pear] [S-22 Oak Line] [S-32 CP Maple] [S-31 Golden Oak] [S-38 Natural Walnut] [S-16N Tan Sawn Oak] [S-12N Valley Maple] [To be selected from manufacturer's standards] [S-24N Grey Cedar] [S-34 Cherry Anigre] [S-11 Creme Ovang] [S-13 Red Birch] [S-26 Earth Rosewood] [S-25 Natural Ovang] [S-23N Golden Birch] [S33N2 Honey Anigre].

Exposed Metal Finish:  [As indicated on drawings] [Kryolite] [Grau] [To be selected from manufacturer's standards] [Sateen].

Monochrome Painted Finish:  Manufacturer's standard color.

Color:  [Silver Standard] [As indicated on drawings] [Blanco Mat] [To be selected from manufacturer's standards] [Flat White] [Custom].

Trims and Closures:  Manufacturer's standard for installation indicated and as required by project conditions [Butt Joint] [1/2” Reveal Joint].

Sound-Absorptive Backer:  Manufacturer's standard “Ultrasorb” recycled cotton fiber material, factory-laminated to backside of the perforated panels in sufficient thickness to achieve specified NRC rating for the panels.

Thickness, Density, and Acoustical Performance:  [1-1/2 inches thick with density of 1.5 pcf, for NRC 0.90 (38 mm thick with density of 24 kg/cu m, for NRC 0.90)] [1 inch thick with density of 6.0 pcf, for NRC 0.85 (2.54 mm thick with density of 96 kg/cu m, for NRC 0.85)] [[\_\_\_] inches thick with density of [\_\_\_] pcf for NRC [\_\_\_] ([\_\_\_] mm thick with density of [\_\_\_] kg/cu m, for NRC [\_\_\_])] [1 inch thick with density of 3.0 pcf, for NRC 0.80 (25.4 mm thick with density of 48 kg/cu m for NRC 0.80)] [1 inch thick with density of 1.5 pcf, for NRC 0.75 (25.4 mm thick with density of 24 kg/cu m, for NRC 0.75)] [2 inches thick with density of 4.0 pcf, for NRC 1.15 (51 mm thick with density of 48 kg/cu m, for NRC 1.15)].

Sound-Absorptive Backer:  Manufacturer's standard “Acoustibond” material factory-laminated to the backside of the perforated panels.

Material:  Nonwoven synthetic fabric, 0.011 inch (0.27 mm) thick.

* + - * 1. Standard Perforations:  Regular patterns of factory-machined, various size [square] [custom] [circular] [rectangular] [obround] openings at 90, 45, or 60 degrees, with unperforated borders at edges of panels.
        2. Standard Perforations Pattern:  See Perforations selection guide IC425 for available perforations.
        3. Perforated Imagery Enhancements:  Images created by a pattern of factory-machined perforations in metal pan panels.

Original Image Type:  [Digital art] [Digital photograph] [Digital logo], [positive] [negative] [Parti] image.

Original Image Source:  To be provided by Owner.

Executed Image Resolution:  [Low-Res] [Hi-Res] [Med-Res] , as defined by manufacturer.

Executed Size:  Image canvas size (panel layout and number of panels) is indicated on drawings.

Panel Canvas:   Wallforms.

Products:

Substitutions:  Not permitted.

* + - * 1. Accessories:  [\_\_\_\_\_\_\_\_\_\_].
        2. Products:

USG Corporation; Wallforms:  www.usg.com/Walls/#sle.

Substitutions:  Not permitted.

* + 1. Accessories
       1. Gypsum Board backer panel: See Section 092116.
       2. Touch-Up Paint for Exposed Surfaces:  Type and color to match wall units and suspension system grid and trim elements.
       3. Touch-Up Paint For Concealed Galvanized Items:   [Zinc oxide] [Zinc rich] type, as recommended by wall system manufacturer.
    2. Fabrication
       1. Shop fabricate wall components to the greatest extent possible.
  1. PART 3  EXECUTION
     1. EXAMINATION
        1. Verify existing conditions before starting work.
        2. Verify that field measurements are as indicated on shop drawings.
        3. Do not begin installation until after interior wet work is dry.
        4. Start of installation constitutes acceptance of project conditions.
     2. Preparation
        1. Coordinate the location of supports with other work.

1. *The paragraph below is optional text*
   * + 1. Layout wall components in pattern according to plan elevations and as shown on shop drawings.
     1. INSTALLATION - WALL PANELS:
        1. Install in accordance with manufacturer's instructions.
        2. Vertical Mounting Rail Installation:
           1. Backer Plates:  Field-cut plates to lengths required and attach to metal framing using countersunk self-tapping fasteners.
           2. Mounting Rails: Field-cut plates to lengths required and attach to << solid substrate, shim as required;  backer plate; or  [\_\_\_\_\_]>>.
        3. Hat-Channel Installation:
           1. Backer Plates:  Field-cut plates to lengths required and attach to metal framing using countersunk self-tapping fasteners.
           2. Hat Channels:  Field-cut plates to lengths required and attach to << solid substrate, shim as required;  backer plate; or  [\_\_\_\_\_]>>.
        4. Install gypsum backer panels in units up to 5ft above finish floor. Install [Acoustibond] [Ultrasorb] acoustic backer in other units.
        5. Fit wall panel units to form [flush tight] [reveal] joints.  Scribe and cut units for accurate fit at borders and around penetrations.
        6. Perimeter Trim:  Field-cut trim pieces to lengths required and attach to substrates.
           1. Field miter corners at locations indicated or recommended by manufacturer.
     2. TOLERANCES
        1. Maximum Variation from Indicated Planes:  1/8 inch in 10 feet (3 mm in 3 m).
        2. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads:  2 degrees.
     3. Cleaning
        1. Clean and touch up minor finish damage.  Remove and replace components that cannot be successfully cleaned and repaired.
2. END OF SECTION