PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes: Metal suspension for the support of gypsum drywall in ceiling and soffit installation for interior finishes.

1.02 SUBMITTALS

A. Samples: Submit samples and data page of Short Span system components, including main runner, cross tees and angle molding.

B. Manufacturer's Data: Submit technical data and drawings illustrating the details of the system and the manufacturer’s recommended installation instructions.

1.03 QUALITY ASSURANCE

A. Single-Source Responsibility: To ensure proper interface, all components shall be produced or supplied by a single manufacturer.

B. All accessory components shall conform to ASTM standards.

C. Fire Resistance Ratings: As indicated by reference to design designations in UL Fire Resistance Directory, for types of assemblies in which drywall ceilings function as a fire protective membrane and tested per ASTM E 119. Installation in accordance with the UL Design being referenced.

D. Coordination of Work:
   1. Coordinate work with installers of related trades including, but not limited to acoustical ceilings, building insulation, gypsum board, heating ventilating and air conditioning, electrical s, and sprinklers.
   2. All work above the ceiling line should be completed prior to installing the drywall sheet goods.
   3. There should be no materials resting against or wrapped around the suspension system, hanger wires or ties.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.

1.05 WARRANTY

A. Suspensions System: Submit a written limited warranty executed by the manufacturer, agreeing to repair or replace grid components that are supplied with a hot-dipped galvanized coating or aluminum base material. Failures include, but are not limited to:
   1. The occurrence of 50% red rust as defined by ASTM D 610 test procedures as a result of defects in materials or factory workmanship.

B. Warranty Period:
   1. Grid: Ten years from date of installation.

C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Products:
   1. Armstrong World Industries, Inc.
   2. Or approved equal.

2.02 SHORT SPAN SUSPENSION SYSTEMS

A. Components:
   1. ShortSpan Beam: Shall be double-web construction (minimum 0.0179 inch prior to protective coating, ASTM C645), hot dipped galvanized (per ASTM A653).
      a. S7712HRC: 96 inch x 1-11/16 inch web height, 1-1/2 inch flange, available with G40 or G90 hot dipped galvanization. (61% Recycle content, 53% Post Consumer, 8% Pre-Consumer).
      b. S7714HRC: 168 inch x 1-11/16 inch web height, 1-1/2 inch flange, available with G40 or G90 hot dipped galvanization. (61% Recycle content, 53% Post Consumer, 8% Pre-Consumer).
   2. Strongback Support for spans over 6 feet in seismic areas and 7 feet in Non-Seismic areas.
      a. SB12: 144 inch x 2 inch, Knockouts 8” on center, with G40 or G90 hot dip galvanization.
   3. QuikStix Soffits DGS: Shall be double web steel construction (minimum 0.0179 inch prior to protective coating, ASTM C645), Tees designed for creating soffits; 1-1/2 inch web height. 1-1/2 inch flange, flattened bulb, bending crimp, knockouts and alignment holes to facilitate creating 15, 30, 45, 60 and 90 degree angles; with G40 or G90 hot dip galvanization.
      a. QS612: 12 foot tee with knockouts 6 inches on center, route holes 6 inches on center.
      b. QS812: 12 foot tee with knockouts 8 inches on center, route holes 8 inches on center.
   4. Gusset Support System:
      a. LWAWT12: 144 inch x 1-3/8 inch x 7/16 inch. Support track to accept gusset.
      b. LWAGU08: 8 inch mounting gusset.
      c. LWAG12: 12 inch mounting gusset.
   5. Wall Molding:
      a. LAM-12HRC: 12 foot Locking Angle Molding, 1-1/4 inch x 1-1/4 inch with pre-engineered locking tabs punched 8 inches on center, knurled surface, screw stop hem, pre-punched holes in top flange, 4” o.c., .018 mil. 25g.
      b. LCM12: 12 foot Locking Channel Molding, 1-3/4 inch x 1-3/4 inch x 1-1/4inch with pre-engineered locking tabs punched 8 inches on center, knurled surface, screw stop hem, pre-punched holes in top flange, 4” o.c., .018 mil. 25g.
      c. PRLAM12: 12 foot Locking Angle Molding, 1-1/4 inch x 1-1/4 inch with pre-engineered locking tabs punched 8 inches on center, knurled surface, screw stop hem, pre-punched holes in top flange, 4” o.c., .018 mil. 25g. (Use in Pre-rock conditions)
      d. AM12HRC: 12 foot Knurled Angle molding, 1-1/4 inch x 1-1/4 inch, knurled surface, screw stop hem, pre-punched holes in top flange, 4” o.c., .018 mil. 25g. (61% Recycle content, 53% Post Consumer, 8% Pre-Consumer).
      e. KAM1510 10 foot Knurled Angle molding, 1-1/2” inch x 1-1/2”, knurled surface, pre-punched holes in top flange 4” o.c., .018 mil. 25g.
      f. KAM10: 10 foot Knurled Angle molding, 1-1/4 inch x 1-1/4 inch, knurled surface, screw stop hem, pre-punched holes in top flange 4” o.c., .018 mil. 25g.
      g. KAM21025: 10 foot Knurled Angle molding, 2 inch x 2 inch, knurled surface, pre-punched holes in top flange 4” o.c., .018 mil. 25g.

h. KAM21020: 10 foot Knurled Angle molding, 2 inch x 2 inch, knurled surface, pre-punched holes in top flange 4” o.c., .033 mil. 20g.

6. Transition Molding: Drywall to Acoustical ceiling.
   a. Pre-Painted Armstrong Global White integral acoustical flange and drywall taping flange, hot dipped cold rolled steel.
      1) 7901: 120 inch with 3/8 inch reveal and 9/16 inch acoustical flange.
      2) 7902: 120 inch with 3/8 inch reveal and 15/16 inch acoustical flange.
      3) 7903: 120 inch with 1 inch acoustical flange.
7. Clips:
   a. MBAC: Main Beam Adapter Clip
   b. DWACS, DW50, DW58: Drywall Attachment Clip for transitions to acoustical ceilings
   c. DW58LT: Transition Clip for 5/8” drywall with Locking Tabs.
   d. MBSC2: Main Beam Spacer Clip.
   e. GSC9: Adjustable Grid Spacer Clip, 9 inch.
   f. GSC12: Adjustable Grid Spacer Clip, 12 inch.
   g. GSC14: Adjustable Grid Spacer Clip, 14 inch.
   h. DW90C: 90 degree, Drywall Angle Clip
   i. XTAC: Cross Tee Adapter Clip.
   j. DDC: Double Drywall Clip.
   k. DLCC: Direct Load Ceiling Clip.
   l. DWC: Drywall Clip.
   m. QSUTC: Uptight Clip.
8. Screws for wallboard application shall be bugle head screws in accordance with thickness of material used.

2.03 CUSTOM PERIMETER TRIM

A. Product/Manufacturer: Axiom - Transitions; Armstrong World Industries, Inc. or approved equal.

B. Components: Edge trim system for transitions between drywall and suspended ceilings. Extruded aluminum alloy 6063 trim channel, 10 foot straight for tegular panel installations. Attachment to grid system is provided by the specially designed Axiom tee-bar connection clips (AXTBC) which lock into specially designed bosses on the Axiom trim channel and are screw-attached to the web of the intersecting Armstrong suspension system members. Sections of trim are joined together using the Axiom splice plate (AXSPLICE).

C. Straight Transition Channel for Tegular (AXTRTESTR): 2-9/16 inch high straight sections with special bosses formed for attachment to the Axiom tee-bar connection clip or hanging clip; commercial quality, extruded aluminum, factory-finished in (factory-applied baked polyester paint to match Armstrong ceiling and grid color.

D. Axiom Splice Plate (AX4SPLICE): Galvanized steel finish; formed to fit into special bosses and locked in place with 4 factory-installed screws.

E. Axiom Tee-Bar Connection Clip (AXTBC): Galvanized steel finish to match trim channel formed to fit into special bosses and locked in place by factory-installed screws and attached to Armstrong Suprafine XL suspension system members.

PART 3 - EXECUTION

3.01 INSTALLATION - GENERAL

A. Install ShortSpan suspension system in accordance with the manufacturer's technical guide CS3590, and in compliance with ASTM installation standard, and with applicable codes as required by the authorities having jurisdiction

B. When required for spans greater then allowed by the manufacturer without support the Armstrong Strongback shall be suspended from the overhead construction with hanger wire or framing, spaced as required for expected ceiling loads, along the length of the ShortSpan beams.

C. Install Short Span Beams at on center spacing as specified by the drywall manufacturer. Typical drywall tee spacing:
   1. 16 inches on center with 5/8 or 1/2 inch gypsum board.
   2. 24 inches on center with 5/8 inch gypsum board.

D. Use channel molding or angle molding to interface with Drywall Grid System to provide perimeter attachment or to obtain drop soffits, verticals, slopes, etc.

E. For light fixtures (Type G, Type F) use secondary framing cross tees as required to frame opening.

F. Single cross tees in a route hole to be secured by 7/16 inch framing screw or alternative methods.

END OF SECTION