## PART 3 - EXECUTION

#### 3.1 INTERIOR WALL FRAMING

- A. GENERAL
  - WALL STUD SPACING: 16" O.C., UNLESS OTHERWISE INDICATED. ROUGH-OPENINGS: CONSTRUCT AS SPECIFIED IN THIS SECTION.
  - DO NOT BRIDGE BUILDING EXPANSION AND CONTROL JOINTS WITH STEEL FRAMING OR
- AT WALL-HUNG CABINETS AND/OR CASEWORK:
  - INSTALL 18 GAGE STUDS AT 12 INCHES O.C. FOR FULL WIDTH OF CABINETWORK PLUS
  - 12 INCHES ON EACH SIDE OF CABINETWORK. GAGE OF STUDS FOR WALLS BEYOND WALL-HUNG CABINETWORK SHALL BE AS SCHEDULED.
- FOR FURR-DOWNS AT WALL-HUNG CABINETS AND/OR CASEWORK, HOUSING FOR DUCTS
  - INSTALL 20 GAGE STUDS AT 16" O.C. PRIOR TO INSTALLATION OF CEILING GRID SO THAT GRID ANGLE WILL ABUT THE VERTICAL PORTION OF FURR-DOWN.
    - USE BRACED SYSTEM FOR DEPTHS OF 48" (VERTICALLY) AND WIDTHS TO 72". USE UNBRACED SYSTEM FOR SOFFITS UP TO 24" X 24".
- ADDITIONAL FRAMING:
  - INSTALL ADDITIONAL FRAMING, BLOCKING AND BRACING AT TERMINATIONS IN THE WORK AND FOR SUPPORT OF THE FOLLOWING:

    - FIXTURES AND EQUIPMENT SERVICES. TOILET ACCESSORIES AND GRAB BARS.
    - FURNISHINGS AND SIMILAR WORK TO COMPLY WITH DETAILS; IF NOT INDICATED, COMPLY WITH "GYPSUM CONSTRUCTION HANDBOOK".
- BRACING OF WALLS ABOVE CEILINGS:
  - WHERE WALLS EXTEND ABOVE CEILINGS, BUT NOT TO STRUCTURE, BRACE TOP OF WALLS WITH DIAGONAL STUD BRACES AT APPROXIMATELY 48" O.C.
  - ATTACH STUD BRACES TO GALVANIZED STEEL ANGLES SECURED TO BOTTOM SIDE OF STRUCTURE.

## 3.2 ROUGH OPENINGS

JAMBS: DOUBLE 20 GAGE STUDS FROM FLOOR TO TOP PLATE. SPOT-GROUT AT JAMB ANCHORS FOR HOLLOW METAL FRAMES BY APPLYING JOINT COMPOUND BEFORE GYPSUM BOARD IS FOR HOLLOW METAL FRAMES BY APPLYING JOINT COMPOUND BEFORE GYPSUM BOARD IS INSTALLED. USE DOUBLE 14 GAGE STUDS FROM FLOOR TO UNDERSIDE OF DECK AT ALL LEAD-LINED DOORS AND FRAMES.

## HEADER:

- FOR VIEW WINDOWS AND OPENINGS UP TO 4'-0" WIDE WITH STANDARD DOORS: FABRICATE SILL AND HEADER SECTIONS FROM 20 GAGE RUNNERS CUT TO LENGTH APPROXIMATELY 6" LONGER THAN ROUGH OPENING. SLIT FLANGES AND BEND WEB TO ALLOW FLANGES TO OVERLAP ADJACENT VERTICAL STUDS. SECURELY ATTACH WITH SCREWS. INSTALL CRIPPLE
- FOR OPENINGS OVER 4'-0" WIDE INSTALL DOUBLE 20 GAGE STUDS ON EDGE AND SCREWED TOGETHER, CUT TO FIT SNUGLY BETWEEN VERTICAL JAMBS INSIDE 20 GAGE
- RUNNER. INSTALL ADDITIONAL RUNNER AND CRIPPLE STUDS AS REQUIRED ABOVE HEADER. FOR OPENINGS OVER LEAD-LINED DOORS INSTALL DOUBLE 14 GAGE STUDS ON EDGE AND SCREWED TOGETHER.
- PLYWOOD BACKING PANELS: FIRE-RETARDANT TREATED PLYWOOD PANELS, APA RATED, 3/8" THICK.

## 3.3 WALLBOARD INSTALLATION

## A. GENERAL:

- COORDINATE GYPSUM WALLBOARD WORK WITH METAL WALL FRAMING/SECTION 09110 AND
- COORDINATE GYPSUM WALLBOARD WORK WITH METAL WALL FRAMING/SECTION 09110 AND

## B. AT FLOOR SLAB:

- FOR RATED AND NON-RATED WALLS: LEAVE 1/4" MAXIMUM SPACE BETWEEN FLOOR SLAB AND BOTTOM EDGE OF GYPSUM BOARD.
- FOR SOUND INSULATED WALLS: SET GYPSUM BOARD IN CONTINUOUS BED OF ACOUSTICAL

## C. AT BOTTOM OF DECK:

- WHERE WALLBOARD EXTENDS TO BOTTOM OF DECK. COPE WALLBOARD TO SHAPES OF FLUTES, IRREGULAR SHAPES, BAR JOISTS, PRECAST SHAPES, ETC. TO FIT TIGHT AGAINST
- DECK FOR FINAL FINISHING. A MAXIMUM GAP OF 1/4" IS ALLOWED. DIRECT-BONDING TO SUBSTRATE:
- WHERE GYPSUM BOARD IS INDICATED TO BE ADHERED DIRECTLY TO A SUBSTRATE (OTHER THAN STUDS, JOINTS, FURRING MEMBERS OR BASE LAYER OF GYPSUM BOARD), COMPLY WITH GYPSUM BOARD MANUFACTURER'S RECOMMENDATIONS.
- TEMPORARILY BRACE OR FASTEN GYPSUM BOARD IN PLACE UNTIL ADHESIVE HAS PROPERLY

## 3.4 INSTALLATION OF DRYWALL TRIM ACCESSORIES

- INSTALL CORNER BEADS AT EXTERNAL CORNERS.
- INSTALL METAL EDGE TRIM WHENEVER EDGE OF GYPSUM BOARD WOULD OTHERWISE BE EXPOSED OR SEMI-EXPOSED. PROVIDE MINIMUM SPACE BETWEEN EDGE TRIM AND MASONRY AND CALK 1/4" MINIMUM SPACE BETWEEN EDGE TRIM AND MASONRY AND CALK.
- WHEN METAL TRIM IS USED TO TERMINATE GYPSUM BOARD AT EXTERIOR WINDOW FRAMES, PROVIDE SPACE BETWEEN TRIM AND WINDOW AND INSTALL INSULATING TAPE OR 1/4" SPACE BETWEEN TRIM AND WINDOW AND INSTALL INSULATING TAPE OR WATERPROOF ACRYLIC CALK.
- INSTALL CONTROL JOINTS AT LOCATIONS INDICATED OR, IF NOT INDICATED, AT SPACINGS AND LOCATIONS REQUIRED BY REFERENCED GYPSUM BOARD APPLICATION AND FINISH STANDARD, AND APPROVED BY THE ARCHITECT FOR VISUAL EFFECT.

## 3.5 GYPSUM BOARD FINISHING

- FINISH JOINTS IN ACCORDANCE WITH GYPSUM BOARD MANUFACTURER'S PRINTED INSTRUCTIONS. FINISH GYPSUM BOARD WITH AN ORANGE PEAL FINISH.
- AFTER FINISHING IS COMPLETED AND BEFORE PAINT OR WALL COVERING IS APPLIED, INSPECT WALLS AND MAKE CORRECTIONS TO PROVIDE SMOOTH SURFACES FREE FROM DEFECTS.
  - WALLS SHALL BE PLUMB AND TRUE. ALL CORNERS SHALL BE PLUMB AND SQUARE.

## PART 4 - GENERAL

## 4.1 GYPSUM BOARD CEILING FRAMING

# A. MATERIALS:

## 1. CEILING FURRING:

- FURRING CHANNELS: HAT-SHAPED, 5/8" X 2-9/16", 20 GAUGE (.0329" WALL THICKNESS), 7/8" X 2-9/16", 20 GAUGE (.0329" WALL THICKNESS), OR 25 GAUGE (.0179" WALL THICKNESS), GALVANIZED.
- CONTRACTOR'S OPTION: 1-5/8" 25 GAUGE (.0179") GALVANIZED STEEL STUDS MAY BE USED AS FURRING WHEN ASSEMBLY DOES NOT REQUIRE A U.L. RATING.
- SUSPENDED CEILING FRAMING:
- CARRYING CHANNELS: 1-1/2" COLD ROLLED BLACK STEEL, 0.475 PSF. HANGER WIRE: 8 GAUGE STEEL WIRE.
- SINGLE-SPAN FIXED CEILING FRAMING:
  - FOR SPANS NO LONGER THAN 8'-0" AND A MAXIMUM 10 PSF LOADING: 3-5/8" STEEL STUDS, 25 GAUGE (.0179"), GALVANIZED, WITH SECTION MODULUS OF 0.106 AND MOMENT OF INERTIAL OF 0.243 ABOUT THE MAJOR AXIS.

#### SECTION 09 30 13 - CERAMIC TILE

- GENERAL: CERAMIC AND QUARRY TILE FOR INTERIOR WALLS AND FLOORS, WITH ACCESSORIES,
- FLOOR TILES: ANSI/TCA A137.1 QUALITY, 0.5 TO 3.0 PERCENT MOISTURE ABSORPTION, CUSHIONED EDGES, AS SCHEDULED IN "FINISH AND COLOR SCHEDULE".
- FINISH: SLIP-RESISTANT AT FLOORS.
- MORTAR/ADHESIVE:
- MORTAR FOR THINSET METHOD: THINSET BONDCOAT, DRY-SET CEMENTITIOUS MORTAR, ANSI/TCA A118.1.
- ADHESIVE FOR GYPSUM BOARD APPLICATIONS: ORGANIC ADHESIVE, ANSI/TCA A136.1, TYPE 2, THINSET BOND TYPE.
- GROUT: "HYDROMENT" CERAMIC TILE CEMENTITIOUS GROUT/JOINT FILLER, PREPARED WITH "HYDROMENT" MULTI-PURPOSE ACRYLIC LATEX MORTAR ADMIXTURE AND GROUT ADDITIVE, MANUFACTURED BY BOSTICK.
- QUALITY ASSURANCE: APPLICABLE REQUIREMENTS OF TILE COUNCIL OF AMERICA (TCA) AND AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) WILL ESTABLISH THE QUALITY OF TILE WORK.
  - TILE PRODUCTS OF DAL-TILE CORP. AND GROUT PRODUCTS OF BOSTICK WILL ESTABLISH A MINIMUM STANDARD OF QUALITY.
- F. SUBMITTALS REQUIRED:
  - CERTIFICATE OF COMPLIANCE: STATING CONFORMANCE WITH ANSI. MASTER GRADE CERTIFICATE: REQUIRED FOR EACH SHIPMENT AND TYPE OF TILE SIGNED BY
  - MANUFACTURER AND INSTALLER. TILE SAMPLES, PRODUCT DATA, MAINTENANCE DATA.
- INSTALLATION: PERFORM TILE WORK IN ACCORDANCE WITH TCA "HANDBOOK FOR CERAMIC TILE
- INSTALLATION" AND ANSI SPECIFICATIONS REFERENCED IN TCA HANDBOOK. AT EXPOSED EDGES OF CERAMIC FLOOR TILE: USE BULLNOSE EDGE.
- CUT AND FIT TILE TIGHT TO PENETRATIONS THROUGH TILE. FORM CORNERS AND BASES NEATLY.
  - PLACE TILE JOINTS UNIFORM IN WIDTH, SUBJECT TO VARIANCE IN TOLERANCE ALLOWED
  - GROUTING: COMPLY WITH ANSI A108.10.
- SEALANT WORK: APPLY SEALANT TO JUNCTION OF TILE AND DISSIMILAR MATERIALS AND JUNCTION OF DISSIMILAR PLANES. COMPLY WITH SEALANT MANUFACTURER'S PRINTED
- INSTRUCTIONS PLACE AND SET MARBLE THRESHOLDS AT TOILET ROOM DOORS.
- CLEANING: CLEAN TILE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTRUCTIONS.

### SECTION 09 30 00 - TILING

- GENERAL: CERAMIC AND QUARRY TILE FOR INTERIOR WALLS AND FLOORS, WITH ACCESSORIES,
- FLOOR TILES: ANSI/TCA A137.1 QUALITY, 0.5 TO 3.0 PERCENT MOISTURE ABSORPTION,

CUSHIONED EDGES, AS SCHEDULED IN "FINISH AND COLOR SCHEDULE".

- FINISH: SLIP-RESISTANT AT FLOORS.
- MORTAR/ADHESIVE:
  - MORTAR FOR THINSET METHOD: THINSET BONDCOAT, DRY-SET CEMENTITIOUS MORTAR
  - ADHESIVE FOR GYPSUM BOARD APPLICATIONS: ORGANIC ADHESIVE, ANSI/TCA A136.1, TYPE 2, THINSET BOND TYPE.
- GROUT: "HYDROMENT" CERAMIC TILE CEMENTITIOUS GROUT/JOINT FILLER, PREPARED WITH "HYDROMENT" MULTI-PURPOSE ACRYLIC LATEX MORTAR ADMIXTURE AND GROUT ADDITIVE,
- QUALITY ASSURANCE: APPLICABLE REQUIREMENTS OF TILE COUNCIL OF AMERICA (TCA) AND AMERICAN NATIONAL STANDARD INSTITUTE (ANSI) WILL ESTABLISH THE QUALITY OF TILE WORK.
  - TILE PRODUCTS OF DAL-TILE CORP. AND GROUT PRODUCTS OF BOSTICK WILL ESTABLISH A MINIMUM STANDARD OF QUALITY.
- F. SUBMITTALS REQUIRED:
  - CERTIFICATE OF COMPLIANCE: STATING CONFORMANCE WITH ANSI.
  - MASTER GRADE CERTIFICATE: REQUIRED FOR EACH SHIPMENT AND TYPE OF TILE SIGNED BY MANUFACTURER AND INSTALLER. TILE SAMPLES, PRODUCT DATA, MAINTENANCE DATA.

INSTALLATION" AND ANSI SPECIFICATIONS REFERENCED IN TCA HANDBOOK.

- INSTALLATION: PERFORM TILE WORK IN ACCORDANCE WITH TCA "HANDBOOK FOR CERAMIC TILE
- AT EXPOSED EDGES OF CERAMIC FLOOR TILE: USE BULLNOSE EDGE. CUT AND FIT TILE TIGHT TO PENETRATIONS THROUGH TILE. FORM CORNERS AND
- TILE JOINTS:

PLACE TILE JOINTS UNIFORM IN WIDTH, SUBJECT TO VARIANCE IN TOLERANCE ALLOWED

- GROUTING: COMPLY WITH ANSI A108.10. SEALANT WORK: APPLY SEALANT TO JUNCTION OF TILE AND DISSIMILAR MATERIALS AND JUNCTION OF DISSIMILAR PLANES. COMPLY WITH SEALANT MANUFACTURER'S PRINTED INSTRUCTIONS.
- PLACE AND SET MARBLE THRESHOLDS AT TOILET ROOM DOORS. CLEANING: CLEAN TILE IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED
- INSTRUCTIONS.

SECTION 09 51 00 - ACOUSTICAL CEILINGS & SUSPENDED GRID SYSTEM

### PART 1 - GENERAL

## 1.1 SECTION INCLUDES

SUSPENDED METAL GRID SYSTEM, COMPLETE WITH ACOUSTICAL CEILING PANELS FOR INTERIOR INSTALLATIONS.

### 1.2 SUBMITTALS

SUBMIT PRODUCT DATA AND SAMPLES, AS PER SECTION 01330.

- MANUFACTURER'S PRODUCT DATA: INDICATING ALL TECHNICAL INFORMATION WHICH SPECIFIES FULL COMPLIANCE WITH REQUIREMENTS OF THIS SECTION, INCLUDING INSTALLATION INSTRUCTIONS FOR GRID SYSTEM AND CEILING PANELS.
- SAMPLES: FOR EACH TYPE OF GRID SYSTEM INCLUDING WALL MOLDING. MAIN RUNNER. CROSS TEES, AND 6" X 6" SAMPLE OF EACH TYPE OF CEILING PANELS.
- QUALIFICATION DATA FOR FIRMS TO DEMONSTRATE THEIR CAPABILITIES AND EXPERIENCE. INCLUDE LIST OF COMPLETED PROJECTS, ADDRESSES, NAMES OF ARCHITECTS AND OWNERS.
- CERTIFICATIONS: MANUFACTURER'S CERTIFICATIONS THAT PRODUCTS COMPLY WITH SPECIFIED REQUIREMENTS INCLUDING LABORATORY REPORTS INDICATING COMPLIANCE WITH SPECIFIED

### 1.3 DELIVERY, HANDLING, STORAGE

- GENERAL: EACH TYPE OF GRID SYSTEM SPECIFIED BELOW SHALL BE COMPLETE WITH DIE-CUT COMPONENTS OF INTERLOCKING TYPES AND MATCHING WALL MOLDINGS, INCLUDING ACCESSORIES REQUIRED TO COMPLETE THE GRID INSTALLATIONS. WITH MAXIMUM DEFLECTION OF 1/360. CONFORMING TO REQUIREMENTS OF ASTM C635. TEES SHALL BE DOUBLE WEB STEEL (ASTM A366) CONSTRUCTION FOR DIRECT HUNG INSTALLATION.
  - STRUCTURAL CLASSIFICATION: INTERMEDIATE DUTY.
  - WEB HEIGHT OF MAIN RUNNER: 1-1/2", AND 1-1/2" ON CROSS TEE UNLESS INDICATED OTHERWISE. EACH EXPOSED BOTTOM FLANGE SHALL BE CONTINUOUS WITH UNBROKEN
  - ROLL FORMED STEEL CAP, EXTENDING THE LENGTH OF THE MEMBER. WALL MOLDINGS: HEMMED ANGLE MOLDING WITH NOMINAL EXPOSED FLANGE, MADE FROM 9/16" EXPOSED FLANGE, MADE FROM .019" NOMINAL STEEL.
  - HANGER WIRE: 12 GAGE MINIMUM DIAMETER GALVANIZED CARBON STEEL (ASTM A641), SOFT
- TEMPER, PRESTRETCHED, WITH A YIELD STRESS LOAD OF AT LEAST 3 FINISH: ALL STEEL ROLL-FORMED PARTS, INCLUDING CAP, SHALL BE CHEMICALLY CLEANED, ELECTROGALVANIZED AND PROTECTIVE-CONVERSION COATED. ALL EXPOSED SURFACES, EXCEPT ALUMINUM, SHALL THEN RECEIVE A BAKED POLYESTER FINISH. ALUMINUM CAPS SHALL BE ETCHED AND RECEIVE A LACQUER FINISH.

## NON-RATED EXPOSED GRID SYSTEM

PRODUCT: ARMSTRONG'S PRELUDE, 15/16" EXPOSED TEE SYSTEM. OR EQUAL GRID SIZE: 2'-0" X 4'-0" AND 2'-0" X 2'-0", AS PER REFLECTED CEILING PLAN.

COLOR: FACTORY-PAINTED, WHITE.

## 2.3 LAY-IN ACOUSTICAL PANELS

SEE SHEET A2.0 AND A.3.0

## **SUBSTITUTIONS**

- THE FOLLOWING MANUFACTURERS ARE ACCEPTABLE ONLY AFTER COMPLIANCE WITH REQUIREMENTS OF THIS SECTION. OTHER MANUFACTURERS ARE ACCEPTABLE FOR EVALUATION ONLY AFTER COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION.
- FOR CEILING GRID SYSTEM:
  - CHICAGO METALLIC CORPORATION.
- NATIONAL ROLLING MILLS INC/MALVERN, PENNSYLVANIA USG INTERIORS.
- FOR CEILING PANELS:
- ARMSTRONG

USG INTERIORS.

## PART 3 - EXECUTION

- 3.1 INSTALLATION PREPERATION
  - VERIFY THAT EXISTING CONDITIONS ARE READY TO RECEIVE WORK.
  - VERIFY THAT LAYOUT OF HANGERS WILL NOT INTERFERE WITH OTHER WORK. BEGINNING OF SUSPENDED ACOUSTICAL CEILING WORK MEANS ACCEPTANCE OF EXISTING
  - INSTALL CEILING SYSTEM AFTER MAJOR WORK ABOVE CEILING IS COMPLETE. COORDINATE THE
  - LOCATION OF HANGERS WITH OTHER WORK. INSTALL CEILING SYSTEM IN ACCORDANCE WITH ASTM C636, MANUFACTURER'S PUBLISHED
  - INSTRUCTIONS AND AS SUPPLEMENTED IN THIS SECTION. INSTALL CEILING SYSTEM CAPABLE OF SUPPORTING IMPOSED LOADS TO A DEFLECTION OF
  - VARIATION FROM FLAT TO LEVEL: 1/8 INCH IN 10 FEET.
  - HANG GRID SYSTEM INDEPENDENT OF WALLS, COLUMNS, DUCTS, PIPES AND CONDUIT. WHERE CARRYING MEMBERS ARE SPLICED, AVOID VISIBLE DISPLACEMENT OF FACE PLANE OF ADJACENT MEMBERS.
  - WHERE DUCTS OR OTHER EQUIPMENT PREVENT THE REGULAR SPACING OF HANGERS. REINFORCE THE NEAREST AFFECTED HANGERS AND RELATED CARRYING CHANNELS TO SPAN
  - DO NOT SUPPORT FIXTURES OR OTHER COMPONENTS ON MAIN RUNNERS OR CROSS RUNNERS
  - IF WEIGHT CAUSES TOTAL DEAD LOAD TO EXCEED DEFLECTION CAPABILITY. IF FIXTURES OR COMPONENTS ARE TOO HEAVY TO BE SUPPORTED FROM CEILING GRID, THEN THE FIXTURES OR COMPONENTS SHALL BE SUPPORTED DIRECTLY FROM BUILDING

  - DO NOT ECCENTRICALLY LOAD CEILING SYSTEM, OR PRODUCE ROTATION OF RUNNERS. INSTALL EDGE MOLDING AT INTERSECTION OF CEILING AND VERTICAL SURFACES, USING LONGEST
  - PRACTICAL LENGTHS. MITTER CORNERS.

INSTALLATION OF CEILING PANELS:

PROVIDE EDGE MOLDING AT JUNCTIONS WITH OTHER INTERRUPTIONS.

SHALL BE REPLACED AT NO ADDITIONAL COST TO OWNER.

- INSTALL CEILING PANELS WHICH ARE FREE FROM TWIST, WARP, DENTS, DAMAGED EDGES AND OTHER DEFECTS DETRIMENTAL TO APPEARANCE AND FUNCTION. DAMAGED PANELS
- FIT BORDER PANELS NEATLY AGAINST ABUTTING SURFACES. FOR TEGULAR OR REVEAL EDGE PANELS: CUT AND REVEAL OR RABBIT EDGES OF CEILING TILES AT ALL BORDER AREAS AND VERTICAL SURFACES. 2.03 LAY-IN ACOUSTICAL PANELS

499 East Palmetto Park Rd.

T 561.479.9884 www.ccsarch.com Florida Registration Number AA26001852

CONSULTANTS:

Boca Raton, FL 33432

ELECTRICAL, MECHANICAL, PLUMBING: AMERICAN UNITED ENGINEERS 4508 SW 24TH STREET FORT LAUDERDALE, FL 33317 PHONE: (954) 471-8657

Project Name

SUITE 300 WORLD EXECUTIVE CENTER 3500 N STATE ROAD 7 LAUDERDALE LAKES, FL 33319

**INTERIOR IMPROVEMENTS** 

FINAL CONTRACT DOCUMENTS

PROJECT NUMBER:

ADDENDA/REVISION Description

1602

MAY 11,2016

SEAL:

CYNTHIA C. SPRAY, AIA AR-94167

PROJECT **SPECIFICATIONS** 

DRAWING NO:

DRAWING TITLE:

A10.3