

CATEGORY II MATERIALS.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. FLOAT/PLATE GLASS: TYPE I, QUALITY Q3, CLEAR UNLESS OTHERWISE INDICATED.
B. TEMPERED GLASS: PROVIDE PRIME GLASS OF COLOR AND TYPE INDICATED, WHICH HAS BEEN HEAT TREATED TO STRENGTHEN GLASS IN BENDING TO NOT LESS THAN 4.5 TIMES ANNEALED STRENGTH.
C. INSULATING GLASS UNITS: SEALED INSULATING UNITS FABRICATED FROM TWO PANELES OF 1/4" THICK GLASS WITH 1/2" DRY AIR SPACE, DUAL SEALING SYSTEM, SPACER, DESICCANT, AND CORNER REINFORCEMENT.
D. GLAZING SEALANTS AND COMPONENTS
1. GENERAL: PROVIDE COLOR OF EXPOSED SEALANT/COMPOUND INDICATED OR AS NOT OTHERWISE INDICATED AS SELECTED BY ARCHITECT FROM MANUFACTURERS' STANDARD COLORS, OR BLACK IF NO COLOR IS SO SELECTED.
2. TWO-PART POLYSULFIDE GLAZING SEALANT: ELASTOMERIC POLYSULFIDE SEALANT COMPLYING WITH FS TT-S-227, CLASS A, TYPE 2.
SPECIALY COMPOUNDED AND TESTED TO SHOW A MINIMUM OF 20 YEARS RESISTANCE TO DETEIORATION IN NORMAL GLAZING APPLICATIONS.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. EXAMINE AREAS AND CONDITIONS UNDER WHICH EACH GLASS PRODUCT IS REQUIRED, EXCEPT AS OTHERWISE SHOWN, EACH INSTALLATION MUST WITHSTAND NORMAL TEMPERATURE CHANGES, WIND LOADING, IMPACT LOADING (FOR OPERATING GASH AND DOORS), WITHOUT FAILURE INCLUDING LOSS OR BREAKAGE OF GLASS, FAILURE OF SEALANTS OR GASKETS, OR DISCOLORATION, CRACKING, OR CRACKING, DETERIORATION OF GLAZING MATERIALS AND OTHER DEFECTS IN THE WORK.
B. CLEAN GLAZING CHANNEL AND OTHER FRAMING MEMBERS TO RECEIVE GLASS, IMMEDIATELY BEFORE GLAZING. REMOVE COATINGS WHICH ARE NOT FIRMLY BONDED TO SUBSTRATE. REMOVE LACQUER FROM METAL SURFACES WHERE ELASTOMERIC SEALANTS ARE USED.
C. COMPLY WITH FGMA "GLAZING MANUAL" AND MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS. USE MANUFACTURERS' RECOMMENDED SPACERS, BLOCKS, PRIMERS, SEALERS, GASKETS AND ACCESSORIES.
D. INSTALL GLASS WITH UNIFORMITY OF PATTERN, DRAW, BOW AND ROLLER MARKS. INSTALL SEALANTS TO PROVIDE COMPLETE WETTINGS AND BOND AND TO CREATE A SUBSTANTIAL WASH AWAY FROM GLASS. INSTALL PRESSURIZED TAPE AND GASKETS TO PROTRUDE SLIGHTLY OUT OF CHANNEL, SO AS TO ELIMINATE DIRT AND MOISTURE POCKETS.
E. INSTALL INSULATING GLASS UNITS TO COMPLY WITH RECOMMENDATIONS BY MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS. EXCEPT AS OTHERWISE SPECIFICALLY INDICATED OR RECOMMENDED BY GLASS AND SEALANT MANUFACTURERS.
3.2 PROTECTION
A. PROTECT EXTERIOR GLASS FROM BREAKAGE IMMEDIATELY UPON INSTALLATION, BY USE OF CROSSED STRIPS ATTACHED TO FRAMING AND HELD AWAY FROM GLASS. DO NOT APPLY MARKERS TO SURFACES OF GLASS. REMOVE NONPERMANENT LABELS AND CLEAN SURFACES. CARE SEALANTS FOR HIGH EARLY STRENGTH AND DURABILITY.
3.3 REPAIR
A. REMOVE AND REPLACE DAMAGED GLASS AND GLAZING. WASH AND POLISH GLASS ON BOTH FACES NOT MORE THAN 4 DAYS PRIOR TO DATE SCHEDULED FOR INSPECTIONS INTENDED TO ESTABLISH DATE OF SUBSTANTIAL COMPLETION. COMPLY WITH GLASS PRODUCT MANUFACTURERS' RECOMMENDATIONS FOR FINAL CLEANING.

END OF SECTION 09800

GYPNUM DRYWALL

SECTION 09250

1.1 GENERAL

1.1 SECTION INCLUDES

- A. PROVIDE SCREW-TYPE GYPSUM DRYWALL AS SHOWN ON THE DRAWINGS, AS SPECIFIED HEREIN, AND AS NEEDED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHOWN IN THE CONTRACT DOCUMENTS. THE WORK INCLUDES, BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING:
1. GYPSUM DRYWALL INCLUDING SCREW-TYPE SUPPORT SYSTEM
2. DRYWALL FINISHING (JOINT TAPE AND COMPOUND TREATMENT)
1.3 REFERENCES
A. GYPSUM BOARD STANDARDS: GA-216 BY GYPSUM ASSOCIATION
1.4 REGULATORY REQUIREMENT
A. FIRE-RESISTANCE RATINGS: WHERE GYPSUM DRYWALL SYSTEMS WITH FIRE RESISTANCE RATINGS ARE INDICATED OR ARE REQUIRED TO COMPLY WITH GOVERNING REGULATIONS, PROVIDE MATERIALS AND INSTALLATIONS IDENTICAL WITH APPLICABLE ASSEMBLIES WHICH HAVE BEEN TESTED AND LISTED BY RECOGNIZED AUTHORITIES, INCLUDING UL.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. METAL SUPPORT STANDARDS: ASTM C-754
B. STUDS: ASTM C 645; 25 GAUGE UNLESS OTHERWISE NOTED.
1. DEPTH OF SECTION: 3-5/8" OR AS NOTED.
2. RUNNERS: MATCH STUDS, TYPE RECOMMENDED BY STUD MANUFACTURER FOR FLOOR AND CEILING. MATCH STUDS, AND FOR VERTICAL ADJUTMENT OF DRYWALL WORK AT OTHER WORK.
C. STUD SYSTEM ACCESSORIES: PROVIDE STUD MANUFACTURERS' STANDARD CLIPS, SHOES, TIES, REINFORCEMENTS, FASTENERS AND OTHER ACCESSORIES AS NEEDED FOR A COMPLETE STUD SYSTEM.
D. FURRING MEMBERS: ASTM C 645; 25 GAUGE, HAT-SHAPED.
E. Z-FURRING MEMBERS: MANUFACTURERS' STANDARD SCREW-TYPE Z-SHAPED FURRING MEMBERS, OF NOT THINNER THAN 26 GAUGE GALVANIZED STEEL, ASTM A 525, G90, OF DEPTH INDICATED, DESIGNED FOR MECHANICALLY ATTACHMENT OF INSULATION BOARDS OR GASKETS TO MONOLITHIC CONCRETE AND MASONRY WALLS. PROVIDE FASTENERS OF TYPE AND SIZE RECOMMENDED INDICATED.
F. EXPOSED WALLBOARD: TYPE X (FIRE RESISTANT) WITH TAPERED LONG EDGES, 5/8" THICKNESS, EXCEPT WHERE OTHERWISE INDICATED, IN MAXIMUM LENGTH AVAILABLE WHICH WILL MINIMIZE END JOINTS.
G. WATER-RESISTANT TYPE: PROVIDE BEHIND ALL CERAMIC TILE WORK AND WHERE OTHERWISE INDICATED, 5/8" THICK WATER-RESISTANT TYPE X.
H. TRIM ACCESSORIES: PROVIDE MANUFACTURERS' STANDARD TRIM ACCESSORIES OF TYPES INDICATED FOR DRYWALL WORK, FORMED OF GALVANIZED STEEL UNLESS OTHERWISE INDICATED, WITH FINISHES AS INDICATED FOR THE INSTALLATION OF CERAMIC TILE. PROVIDE TYPE OF SETTING AND GROUTING MATERIALS AND JOINT COMPOUND, PROVIDE CORNER BEADS, L-TYPE EDGE TRIM-BEADS, U-TYPE EDGE TRIM-BEADS, SPECIAL L-KERF-TYPE EDGE TRIM-BEADS.
I. JOINT COMPOUND: ASTM C 475. FOR INTERIOR WORK PROVIDE SINGLE, MULTI-PURPOSE GRADE, READY-MIXED VINYL-TYPE, WITH PERFORATED TYPE PAPER JOINT TAPE.
J. GYPSUM BOARD FASTENERS: GYPSUM BOARD SCREWS: ASTM C 1002.
K. PROVIDE AUXILIARY MATERIALS FOR GYPSUM DRYWALL WORK OF THE TYPE AND GRADE RECOMMENDED BY THE MANUFACTURER GYPSUM BOARDS.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. ALLOWABLE TOLERANCES: 1/16" OFFSETS BETWEEN PLANES OF BOARD FACES, AND 1/8" IN 8'-0" FOR PLUMB, LEVEL, AND SLOPE.
B. INSTALLATION OF WALL PARTITION SUPPORT SYSTEMS: INSTALL SUPPLEMENTARY FRAMING, BLOCKING AND BRACING TO SUPPORT FIXTURES, EQUIPMENT, SERVICE HEAVY TRIM, FURNISHINGS AND SIMILAR WORK WHICH CANNOT BE ADEQUATELY SUPPORTED ON GYPSUM BOARD ALONE. INSTALL RUNNER TRACKS AT FLOORS, CEILINGS AND OTHER PLACES AND IN WALLS WHERE CONCRETE AND MASONRY WALLS. PROVIDE FASTENERS OF TYPE AND SIZE RECOMMENDED INDICATED. SPACE STUDS 16" O.C., EXCEPT AS OTHERWISE INDICATED.
C. ISOLATE STUDS FROM TRANSFER OF STRUCTURAL LOADING TO SYSTEM, BOTH HORIZONTALLY AND VERTICALLY, BY SPRING OR CUSHIONED TYPE JOINTS TO ATTAIN LATERAL SUPPORT AND AVOID AXIAL LOADING.
D. AT OPENINGS FOR DOORS, INSTALL DOUBLE (2 EA) 20 GAUGE STUDS AT ALL OPENINGS, SCREW ATTACH WOOD OF BACK-TO-BACK STUDS DIRECT TO JOINTS. ANCHOR CLIPS NESTED BETWEEN FLANGE OF STUD, UNLESS OTHERWISE INDICATED. PROVIDE OPENINGS OTHER THAN DOOR OPENINGS WITH 1/2" THICK STUDDING IN EACH SPACE OR ON EACH WALL. FRAMING BELOW SILLS OF OPENINGS TO MATCH FRAMING ABOVE DOOR HEADS.
E. INSTALLATION OF WALL FURRING: SPACE WALL FURRING MEMBER: 16" O.C., EXCEPT AS OTHERWISE INDICATED. ERECT THE INSULATING WALL VERTICALLY AND BRACE IN PLACE WITH 2-FURRING MEMBERS SPACED 16" O.C. AT CORNERS. ATTACH WALL FURRING MEMBER TO CONCRETE STUD NAILS OR POWER-DRIVE FASTENERS SPACED 16" O.C. AT CORNERS. ATTACH WIDE FLANGE OF FURRING MEMBER TO WALL WITH SHORT NAILS EXTENDING BEYOND CORNER START FROM THIS POINT OVER WITH 1/2" STRIP OF INSULATION FOLLOWED BY FURRING MEMBER. IN THE NORMAL MANNER. PROVIDE INTERIOR CORNERS, SPACE SECOND FURRING MEMBER MORE THAN 12" FROM CORNER. CUT INSULATION TO FIT. UNLIT GYPSUM BOARD. INSTALL HOLD INSULATING FLANGE WITH 10" STAPES FABRICATED FROM 18 GAUGE GALVANIZED STEEL. INSERT THROUGH SLOT IN WEB OF MEMBER, OR BY AN EQUALLY ACCEPTED METHOD.
F. INSTALL ELEMENTS BY FRAMING, RUNNERS, FURRING, BLOCKING AND BRACING AT OPENINGS AFTER FRAMING IS IN THE WORK, AND AT LOCATIONS REQUIRED TO SUPPORT FIXTURES, EQUIPMENT SERVICES, HEAVY TRIM, FURNISHINGS AND SIMILAR WORK WHICH CANNOT BE ADEQUATELY SUPPORTED DIRECTLY ON GYPSUM BOARD ALONE.
G. INSTALL WALL PARTITION BOARDS VERTICALLY TO AVOID END-BUTT JOINTS WHEREVER POSSIBLE.
H. PARTITION WALLS AND SIMILAR HIGH WALLS, INSTALL BOARDS HORIZONTALLY WITH END JOINTS STAGGERED OVER STUDS.
I. INSTALL EXPOSED GYPSUM BOARD WITH FACE SIDE OUT. DO NOT INSTALL IMPERFECT, DAMAGED OR DAMP BOARDS. BUTT BOARDS TOGETHER FOR A LIGHT CONTACT AT EDGES AND ENDS WITH NOT MORE THAN 1/16" OPEN SPACE BETWEEN BOARDS. DO NOT FORCE INTO PLACE.
J. LOCATED EITHER EDGE OR END JOINTS OVER SUPPORTS, EXCEPT IN HORIZONTAL APPLICATIONS OR WHERE INTERMEDIATE SUPPORTS OR GYPSUM BOARD BACK-BLOCKING IS

- PROVIDED BEHIND END JOINTS. POSITION BOARDS SO THAT BOTH TAPERED EDGE JOINTS ABUT, AND MILL-CUT OR FIELD-CUT END JOINTS ABUT. DO NOT PLACE TAPERED EDGES AGAINST CUT EDGES OR AGAINST STAGGER VERTICAL JOINTS OVER DIFFERENT STUDS ON OPPOSITE SIDES OF PARTITIONS.
K. ATTACH GYPSUM BOARD TO FRAMING AND BLOCKING AS REQUIRED FOR ADDITIONAL SUPPORT AT OPENINGS AND CUTOUTS. FORM CONTROL JOINTS AND EXPANSION JOINTS WITH SPACE BETWEEN EDGES OF BOARDS, PREPARED TO RECEIVE TRIM ACCESSORIES. PROVIDE BOTH FACES OF STUD PARTITION FRAMING WITH GYPSUM BOARD IN CONCEALED SPACES (ABOVE CEILINGS, ETC.), EXCEPT IN CASE WALLS WHICH ARE PROPERLY BRACED INTERNALLY.
L. ISOLATE PERIMETER OF NON-LOAD-BEARING DRYWALL PARTITIONS AT STRUCTURAL ADJUTMENTS. PROVIDE 1/16" TO 1/2" SPACE AND TRIM EDGE WITH L-TYPE SEMI-FINISHING EDGE TRIM. SEAL JOINTS WITH ACOUSTICAL SEALANT. DO NOT FASTEN DRYWALL DIRECTLY TO STUD SYSTEM RUNNER TRACKS.
M. SPACE FASTENERS IN GYPSUM BOARDS IN ACCORDANCE WITH REFERENCED STANDARDS AND MANUFACTURERS' RECOMMENDATIONS.
3.2 GYPSUM DRYWALL APPLICATION METHODS
A. SINGLE-LAYER APPLICATION: INSTALL EXPOSED GYPSUM BOARD.
B. ON PARTITIONS/WALLS APPLY GYPSUM BOARD VERTICALLY (PARALLEL), UNLESS OTHERWISE INDICATED, AND PROVIDE SHEET LENGTHS WHICH WILL MINIMIZE END JOINTS.
C. ON FURRING MEMBERS APPLY GYPSUM BOARD VERTICALLY (PARALLEL) WITH NO END JOINTS. LOCATE EDGE JOINTS OVER FUERING MEMBERS.
D. DIRECT-BONDING TO SUBSTRATE: WHERE GYPSUM BOARD IS INDICATED TO BE DIRECTLY ADHERED TO A SUBSTRATE (OTHER THAN STUDS, JOINTS, FURRING MEMBERS OR BASE LAYER OF GYPSUM BOARD), COMPLY WITH GYPSUM BOARD MANUFACTURERS' AND RECOMMENDATIONS.
E. VINYLOCK: AS MANUFACTURED BY CAPRAL. IF NECESSARY, USE VINYLOCK FASTENING ADHESIVE HAS SET.
E. INSTALLATION OF DRYWALL TRIM ACCESSORIES: WHERE FEASIBLE, USE THE SAME FASTENERS TO ANCHOR TRIM ACCESSORY FLANGES AS REQUIRED TO FASTEN GYPSUM BOARD TO THE SUPPORTING STRUCTURE.
F. TRIM ACCESSORIES: PROVIDE TRIM ACCESSORIES WITH MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS. INSTALL METAL CORNER BEADS AT EXTERNAL CORNERS OF DRYWALL WORK.
F. INSTALL EDGE TRIM WHENEVER EDGE OF GYPSUM BOARD WOULD OTHERWISE BE EXPOSED OR SET-UP EXPOSED: PROVIDE TYPE WITH FACE FLANGE TO RECEIVE JOINT COMPOUND. INSTALL L-TYPE TRIM WHERE WORK IS TIGHTLY ABUTTED TO OTHER WORK AND INSTALL SPECIAL KERF-TYPE WHERE OTHER WORK IS KERFED TO RECEIVE LONG LEG OF L-TYPE TRIM. INSTALL U-TYPE WHERE EDGE IS EXPOSED, REVEALED, GASKETED, OR SEALANT-FILLED (INCLUDING EXPANSION JOINTS).
G. FINISHING: REFER TO SECTIONS ON PAINTING, COATINGS AND WALL COVERINGS IN DIVISION 9 FOR DECORATIVE FINISHES TO BE APPLIED TO DRYWALL WORK.

- H. PARTIAL FINISHING: OMIT TRIM COAT (IF SPECIFIED) AND SANDING ON CONCEALED DRYWALL WORK WHICH IS INDICATED FOR DRYWALL FINISHING OR WHICH REQUIRES FINISHING TO ACHIEVE FIRE RESISTANCE RATING, SOUND RATING OR TO ACT AS AIR OR SMOKE BARRIER. REFER TO SECTIONS ON PAINTING, COATINGS AND WALL COVERINGS IN DIVISION 9 FOR DECORATIVE FINISHES TO BE APPLIED TO DRYWALL WORK.
3.3 PROTECTION
A. INSTALLER SHALL ADVISE CONTRACTOR OF REQUIRED PROCEDURES FOR PROTECTING GYPSUM DRYWALL WORK FROM DAMAGE AND DETERIORATION DURING REMAINDER OF CONSTRUCTION PERIOD.
END OF SECTION 09250

CERAMIC TILE

SECTION 09300

1.1 GENERAL

1.1 SECTION INCLUDES

- A. PROVIDE TILE AS SHOWN ON THE DRAWINGS, AS SPECIFIED HEREIN, AND AS NEEDED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHOWN IN THE CONTRACT DOCUMENTS.
1.2 SUBMITTALS
A. PRODUCT DATA: SUBMIT MANUFACTURERS' TECHNICAL INFORMATION AND INSTALLATION INSTRUCTIONS FOR MATERIALS TO BE USED.
B. CERTIFICATIONS AND OTHER DATA TO SHOW COMPLIANCE WITH THESE SPECIFICATIONS.
1.3 QUALITY ASSURANCE
A. HANDLE, STORE, MIX AND APPLY PROPRIETARY SETTING AND GROUTING MATERIALS IN COMPLIANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. PROVIDE MATERIALS OBTAINED FROM ONE SOURCE FOR EACH TYPE AND COLOR OF TILE, GROUT, AND SETTING MATERIALS.
C. INSTALLER QUALIFICATIONS: ENGAGE AN EXPERIENCED INSTALLER WHO HAS SUCCESSFULLY COMPLETED TILE INSTALLATIONS SIMILAR IN MATERIAL, DESIGN, AND EXTENT TO THAT INDICATED FOR PROJECT.
1.4 DELIVERY, STORAGE, & HANDLING
A. DELIVER MATERIALS IN ORIGINAL UNOPENED CONTAINERS WITH LABELS INTACT AND LEGIBLE AT TIME OF USE. STORE UNDER CONDITIONS RECOMMENDED BY THE MANUFACTURER. DO NOT STORE AT THE PROJECT SITE ANY MATERIAL WHICH HAS EXCEEDED THE SHELF-LIFE RECOMMENDED BY ITS MANUFACTURER.
1.5 SITE CONDITIONS
A. MAINTAIN ENVIRONMENTAL CONDITIONS AND PROTECT WORK DURING AND AFTER INSTALLATION IN ACCORDANCE WITH REFERENCED STANDARDS AND MANUFACTURERS' PRINTED RECOMMENDATIONS.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. TILE MATERIALS: REFER TO THE DRAWINGS FOR THE SCHEDULE OF PRODUCTS, MANUFACTURERS AND COLORS OF TILE MATERIALS.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. TILE INSTALLATION STANDARDS: COMPLY WITH APPLICABLE REQUIREMENTS OF ANSI 109 SERIES OF TILE INSTALLATION STANDARDS INCLUDED UNDER "AMERICAN NATIONAL STANDARD SPECIFICATIONS FOR THE INSTALLATION OF CERAMIC TILE" IN THIS SECTION. PROVIDE TYPE OF SETTING AND GROUTING MATERIALS AND JOINT COMPOUND INDICATED.
B. PROTECTIVE COATING: AT INSTALLERS OPTION, AND WHERE NEEDED TO PREVENT ADHESION OR STAINING OF EXPOSED TILE SURFACES BY GROUT, PROTECT EXPOSED SURFACES OF TILE AGAINST ADVANCEMENT OF GROUT BY PRECOATING THEM WITH AN CONTINUOUS FILM OR TEMPORARY PROTECTIVE COATING. TAKING CARE NOT TO COAT UNEXPOSED TILE SURFACES.
C. FLOOR TILE SHALL BE THIN SET ON PORTLAND CEMENT MORTAR MEETING ANSI A118.1. USE SANDED CEMENT GROUT. ACRYLIC ADDITIVE, IN ACCORDANCE WITH TCA RECOMMENDATION METHOD NO. 111.
D. WALL TILE SHALL BE THIN SET ON ORGANIC ADHESIVE MEETING ANSI A136.1, TYPE 1. USE SANDED PORTLAND CEMENT MORTAR WITH LEX-ACRYLIC ADDITIVE, PER TCA METHOD NO. 142. AN EXPOSED TILE SURFACE ON A WALL (VERTICAL OR HORIZONTAL) SHALL BE THIN SET ON ORGANIC ADHESIVE MEETING ANSI A136.1, TYPE 1.
E. COMPLY WITH MANUFACTURERS' INSTRUCTIONS FOR MIXING AND INSTALLATION OF PROPRIETARY MATERIALS.
F. EXTENSIVE TILE WORK RECESSES AND UNDER OR BEHIND EQUIPMENT AND FIXTURES, TO FORM A COMPLETE WORKING SURFACE WITHOUT INTERRUPTIONS, EXCEPT AS OTHERWISE INDICATED. REMOVE STUDS AND OTHER OBSTRUCTIONS, EDGES AND CORNERS WITHOUT DISRUPTING THE TRIM OR JOINT ALIGNMENTS.
G. ACCURATELY FORM INTERSECTIONS AND RETURNS. PERFORM CUTTING AND DRILLING OF TILE WITHOUT MARRING VISIBLE SURFACES. CAREFULLY GRIND CUT EDGES OF TILE BEHINDING TRIM, FINISH OR BUILT-IN ITEMS FOR STRAIGHT ALIGNED JOINTS TO TILE CLOSELY TO ELECTRICAL OUTLETS, PIPING, FIXTURES AND OTHER PENETRATIONS SO THAT PLATES, COLORS, OR COVERS OVERLAP TILE.
H. JOINTING PATTERN: UNLESS OTHERWISE SHOWN, LAY TILE IN GRID PATTERN. ALIGN JOINTS WHEN ADJOINING TILES ON FLOOR, BASE, WALLS AND TRIM ARE SAME SIZE. LAYOUT TILE WORK AND CENTER TILE WORK IN EACH SPACE OR ON EACH WALL AREA. ADJUST TO MINIMIZE TILE CUTTING. PROVIDE UNIFORM JOINT WIDTHS, UNLESS OTHERWISE SHOWN.
3.2 CLEANING AND PROTECTION
A. UPON COMPLETION OF PLACEMENT AND GROUTING, CLEAN ALL CERAMIC TILE SURFACES SO THEY ARE FREE OF FOREIGN MATTER.
B. UNGLAZED TILE MAY BE CLEANED WITH ACID SOLUTIONS ONLY WHEN PERMITTED BY TILE AND GROUT MANUFACTURERS' PRINTED INSTRUCTIONS, BUT NOT SOONER THAN 14 DAYS AFTER INSTALLATION. PROTECT METAL SURFACES, CAST IRON AND VITREOUS PLUMBING FIXTURES FROM EFFECTS OF ACID CLEANING. FLUSH SURFACE WITH CLEAN WATER BEFORE AND AFTER CLEANING.
C. FINISHED TILE WORK: LEAVE FINISHED INSTALLATION CLEAN AND FREE OF CRACKED, CHIPPED, BROKEN UNBONDED, OR OTHERWISE DEFECTIVE TILE WORK.
D. PROTECTION: WHEN RECOMMENDED BY TILE MANUFACTURER, APPLY A PROTECTIVE COAT OF NEUTRAL PROTECTIVE CLEANER TO COMPLETED TILE WALLS AND FLOORS. PROTECT INSTALLED TILE WORK WITH KRAFT PAPER OR OTHER HEAVY COVERING DURING CONSTRUCTION PERIOD TO PREVENT DAMAGE AND WEAR.
E. PROTECT FOOT AND WHEEL TRAFFIC FROM USING TILED FLOORS FOR AT LEAST THREE (3) DAYS AFTER GROUTING IS COMPLETED.
F. BEFORE FINAL INSPECTION REMOVE PROTECTIVE COVERINGS AND RINSE NEUTRAL CLEANER FROM TILE SURFACES.

END OF SECTION 09300

ACOUSTICAL CEILINGS

SECTION 09510

1.1 GENERAL

1.1 SECTION INCLUDES

- A. PROVIDE ACUSTICAL CEILINGS AS SHOWN ON THE DRAWINGS, AS SPECIFIED HEREIN, AND AS NEEDED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHOWN IN THE CONTRACT DOCUMENTS.

- A. PROVIDE ACUSTICAL CEILINGS AS SHOWN ON THE DRAWINGS, AS SPECIFIED HEREIN, AND AS NEEDED TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SHOWN IN THE CONTRACT DOCUMENTS.
1.2 QUALITY ASSURANCE
A. INSTALLER: FIRM WITH NO LESS THAN THREE (3) YEARS OF SUCCESSFUL EXPERIENCE IN INSTALLATION OF ACOUSTICAL CEILINGS SIMILAR TO REQUIREMENTS FOR THIS PROJECT AND WHICH IS ACCEPTABLE TO MANUFACTURER OF ACOUSTICAL UNITS, AS SHOWN BY CURRENT WRITTEN SAMPLES FOR COLOR, TEXTURE, AND COVERAGE. REMOVE, REFINISH, OR REPAINT WORK NOT IN COMPLIANCE WITH SPECIFIED REQUIREMENTS.
A. DELIVER MATERIALS IN ORIGINAL UNOPENED CONTAINERS AND STORE THEM IN A FULLY ENCLOSED SPACE WHERE THEY WILL BE PROTECTED AGAINST DAMAGE FROM MOISTURE, ABUTMENTS, PRELIGHT, OR SURFACE CONTAMINATION OR OTHER CAUSES.
1.4 EXTRA MATERIALS
A. MAINTENANCE STOCK: AT TIME OF COMPLETING INSTALLATION, DELIVER STOCK OF MAINTENANCE MATERIAL TO OWNER. FURNISH FULL SIZE UNITS MATCHING UNITS INSTALLED, PACKAGED WITH PROTECTIVE COVERING FOR STORAGE, AND IDENTIFIED WITH APPROPRIATE LABELS. PROVIDE MAINTENANCE STOCK EQUAL TO 2.0% OF EACH TYPE OF THE TOTAL ACOUSTICAL PANELS INSTALLED.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. ACOUSTICAL PANELS: REFER TO DRAWINGS FOR SCHEDULE OF CEILING MATERIALS AND SIZES.
B. KITCHEN & SERVING AREA CEILINGS: WATER RESISTANT CEILING PANELS: 24 x 48" x 1/2" VINYL SURFACED GYPSUM BOARD PANELS EQUAL TO GYPSUM CEILING PANELS, AS MANUFACTURED BY USG, OR EQUIVALENT MATERIALS, IF NECESSARY.
C. TYPICAL CEILING GRID: ARMSTRONG PRELUDE SYSTEM 15/16" T-GRID COLOR=WHITE
D. ALUMINUM CEILING GRID (FOR USE WITH WATER-RESISTANT CEILING PANELS): ARMSTRONGS PRELUDE SYSTEM 15/16" T-GRID COLOR=WHITE
2.2 CEILING MATERIALS
A. GENERAL: COMPLY WITH ASTM C 636, AS APPLICABLE TO TYPE OF SUSPENSION SYSTEM REQUIRED FOR TYPE OF CEILING UNITS INDICATED. COORDINATE WITH OTHER WORK SUPPORTED BY OR PENETRATING THROUGH CEILINGS, INCLUDING LIGHT FIXTURES, HVAC EQUIPMENT, AND PARTITION SYSTEM (IF ANY).
B. PRIME STAIN OR SEAL WOOD TO BE PAINTED IMMEDIATELY UPON DELIVERY. PRIME EDGES, ENDS, FACES, UNDERSIDES, AND BACKSIDES OF WOOD, INCLUDING CABINETS, COUNTERS, CABS, AND PANELING. WHEN TRANSPARENT FINISH IS REQUIRED, BACKPRIME WITH SPAR VARNISH. BACKPRIME PANELS ON INTERIOR PARTITIONS WHERE MASONRY PLASTER OR OTHER WET WALL CONSTRUCTION OCCURS ON BACKSIDE. SEAL EXPLOIT BOTTOMS, AND CUTOUTS OF UNFINISHED WOOD DOORS WITH A HEAVY COAT OF WOOD SEALER IMMEDIATELY UPON DELIVERY.
F. CLEAN NONGALVANIZED FERROUS-METAL SURFACES THAT HAVE NOT BEEN SHOP COATED, REMOVE OIL, GREASE, DIRT, LOOSE MILLS, AND OTHER CONTAMINANTS. USE SOLVENTS TO REMOVE OIL OR MECHANICAL CLEANING METHODS THAT COMPLY WITH RECOMMENDATIONS OF THE STEEL STRUCTURES PAINTING COUNCIL.
G. TOUCH UP SHOP-APPLIED PRIME COATS THAT HAVE BEEN CHIPPED, WIPED OFF, CLEAN WITH SOLVENTS RECOMMENDED BY THE PAINT MANUFACTURER. TOUCH UP WITH THE SAME COATINGS AS THE SURFACE BEING REPAIRED.
H. MATERIALS PREPARATION: CAREFULLY MIX AND PREPARE PAINT MATERIALS IN ACCORDANCE WITH MANUFACTURERS' DIRECTIONS. MAINTAIN CONTAINER USED FOR MIXING AND APPLICATION OF PAINT IN A CLEAN CONDITION. FREE OF FOREIGN MATERIALS AND CONTAMINANTS. CLEAN MIXING AND APPLICATION TOOLS. DO NOT STRIP SURFACE TOOLS TO DENSITY. STRIP AS REQUIRED DURING APPLICATION. DO NOT STRIP SURFACE TOOLS TO MATERIAL. REMOVE FILM IF, IF NECESSARY, STRAIN MATERIAL BEFORE USING. USE ONLY THINNERS APPROVED BY THE PAINT MANUFACTURER, CONSISTENTLY WITH THE RECOMMENDED LIMITS.
3.2 APPLICATION
A. APPLY PAINT IN ACCORDANCE WITH MANUFACTURERS' DIRECTIONS. USE APPLICATORS AND TECHNIQUES BEST SUITED TO SUBSTRATE AND TYPE OF MATERIAL BEING APPLIED. DO NOT PAINT OVER DIRT, RUST, SLAG, GREASE, MOISTURE, SCUFFED SURFACES, OR OTHER DEFECTIVE SURFACES.
B. SCHEDULING: APPLY FIRST COAT TO CLEANED SURFACES THAT HAVE BEEN CLEANED, PREPARED, AND/OR OTHERWISE PREPARED FOR PAINTING AS SOON AS PRACTICABLE AFTER PREPARATION AND BEFORE SUBSTRATE SURFACE DETERIORATION. ALLOW SUFFICIENT TIME BETWEEN SUCCESSFUL COATINGS TO PERMIT PROPER DRYING. DO NOT RECOAT UNTIL TOIL THAT THUMB PRESSURE, AND APPLICATION OF ANOTHER COAT OF PAINT DOES NOT CAUSE RUBBING OR LOSS OF ADHESION OF THE UNDERCOAT.
C. APPLY PAINT TO COMPLETELY COVER PREVIOUSLY PAINTED SURFACES, TO PROVIDE AN UNIFORM FINISH. UNIFORM COLOR, APPEARANCE AND COVERAGE.
D. CLOUDINESS: SPOTTING, HOLIDAYS, LAP MARKS, BRUSH MARKS, RUNS, SAGS, ROPINESS OR OTHER SURFACE IMPERFECTIONS WILL NOT BE ACCEPTABLE.
E. THE NUMBER OF COATS AND FILM THICKNESS REQUIRED IS THE SAME REGARDLESS OF THE APPLICATION METHOD. DO NOT APPLY SUCCESSIVE COATS UNTIL THE PREVIOUS COAT HAS CURED AS RECOMMENDED BY THE MANUFACTURER. SAND BETWEEN APPLICATIONS WHERE SANDING IS REQUIRED TO PRODUCE AN EVEN SMOOTH SURFACE IN ACCORDANCE WITH THE MANUFACTURERS' DIRECTIONS.
F. APPLY ADDITIONAL PAINT COATS WHEN UNDERCOATS, STAINS OR OTHER CONDITIONS SHOW THROUGH. APPLY UNIFORM FILMS OF UNIFORM FINISH, COLOR AND APPEARANCE. GIVE SPECIAL ATTENTION TO INSURE THAT SURFACES, INCLUDING EDGES, CORNERS, CREVICES, AND EXPOSED FASTENERS RECEIVE A DRY FILM THICKNESS EQUIVALENT TO THAT OF FLAT SURFACES.
G. PAINT INTERIOR SURFACES OF DUCTS, WHERE VISIBLE THROUGH REGISTERS OR GRILLES WITH A FLAT, NONSPARKING BLACK PAINT. PAINT BACK SIDES OF ACCESS PANELS WITH A FLAT, NONSPARKING BLACK PAINT.
H. MINIMUM COATING THICKNESS: APPLY MATERIALS AT NOT LESS THAN THE MANUFACTURERS' RECOMMENDED SPREADING RATE. PROVIDE A TOTAL DRY FILM THICKNESS OF THE ENTIRE SYSTEM AS RECOMMENDED BY THE MANUFACTURER.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS AND CONDITIONS UNDER WHICH THIS SECTION WILL BE PERFORMED, DO NOT PROCEED IF CONDITIONS EXIST THAT ARE DETRIMENTAL TO PROPER AND TIMELY COMPLETION. COMMENCEMENT OF THIS WORK WILL BE CONSTRUED AS ACCEPTANCE OF EXISTING CONDITIONS OR PRIOR WORK BY OTHERS, AND ASSUMPTION OF RESPONSIBILITY FOR SATISFACTORY INSTALLATION.
3.2 PREPARATION
A. COORDINATION: FURNISH LAYOUTS FOR INSERTS, CLIPS, OR OTHER SUPPORTS REQUIRED TO BE INSTALLED BY OTHER TRADES FOR SUPPORT OF ACOUSTICAL CEILINGS.
B. MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH CEILING. AVOID USE OF LESS-THAN-HALF WIDTH UNITS AT BORDERS, AND COMPLY WITH REFLECTED CEILING PLANS WHEREVER POSSIBLE.
3.3 INSTALLATION
A. COORDINATION: FURNISH LAYOUTS FOR INSERTS, CLIPS, OR OTHER SUPPORTS REQUIRED TO BE INSTALLED BY OTHER TRADES FOR SUPPORT OF ACOUSTICAL CEILINGS.
B. MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH CEILING. AVOID USE OF LESS-THAN-HALF WIDTH UNITS AT BORDERS, AND COMPLY WITH REFLECTED CEILING PLANS WHEREVER POSSIBLE.
3.3 INSTALLATION
A. COORDINATION: FURNISH LAYOUTS FOR INSERTS, CLIPS, OR OTHER SUPPORTS REQUIRED TO BE INSTALLED BY OTHER TRADES FOR SUPPORT OF ACOUSTICAL CEILINGS.
B. MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACOUSTICAL UNITS TO BALANCE BORDER WIDTHS AT OPPOSITE EDGES OF EACH CEILING. AVOID USE OF LESS-THAN-HALF WIDTH UNITS AT BORDERS, AND COMPLY WITH REFLECTED CEILING PLANS WHEREVER POSSIBLE.

END OF SECTION 09510

PAINTING

SECTION 09900

1.1 GENERAL

1.1 SUMMARY

- A. INTERIOR PREPARATION AND PAINTING OR FINISHING OF INTERIOR EXPOSED TO VIEW THROUGHOUT THE PROJECT AND IN ACCORDANCE WITH REQUIREMENTS HEREIN, EXCEPT WHERE A NATURAL FINISH OR A MATERIAL IS SPECIFICALLY NOTED AS A SURFACE NOT TO BE PAINTED. PAINT ALL EXPOSED SURFACES WHETHER OR NOT PAINTING IS DESIGNATED IN THE DRAWINGS. WHERE SURFACES ARE NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES.
B. THE WORK OF THIS SECTION INCLUDES, BUT IS NOT NECESSARILY LIMITED TO PAINTING OR FINISHING OF THE FOLLOWING ITEMS:
1. HOLLOW METAL DOORS AND FRAMES
2. ALL INTERIOR SURFACES NOT FINISHED OTHERWISE.
3. EXPOSED PORTIONS OF DUCTWORK, FIXTURE TRIMS AND MECHANICAL GRILLES
4. PARTIALLY CONCEALED, INTERIOR PORTIONS OF DUCTS, VISIBLE THROUGH REGISTERS OR GRILLES
5. INTERIOR FINISH CARPENTRY
6. EXPOSED ROOF DECK AND STRUCTURAL FRAMING AND SUPPORT SYSTEM
C. PAINTING NOT REQUIRED: UNLESS OTHERWISE INDICATED, PAINTING IS NOT REQUIRED ON PLASTIC LAMINATE, PREFINISHED SHEET METAL, PLUMBING FIXTURES, ELECTRICAL EQUIPMENT (EXCLUDING EXPOSED DISTRIBUTION CABINETS) & ELECTRICAL DEVICES, OR FLOOR AND CEILING SURFACES. PAINTING IS NOT REQUIRED ON SURFACES SUCH AS WALLS OR CEILINGS IN CONCEALED OR INACCESSIBLE AREAS, METAL SURFACES OF ANODIZED ALUMINUM, STAINLESS STEEL, CHROMIUM PLATE AND SIMILAR FINISHED MATERIALS WILL NOT REQUIRE FINISH PAINTING, EXCEPT AS OTHERWISE INDICATED IN THE FINISH HARDWARE SCHEDULE. DO NOT PAINT OVER CODE-REQUIRED LABELS OR EQUIPMENT IDENTIFICATION LABELS.
1.2 QUALITY ASSURANCE
A. USE ONLY SKILLED PAINTERS FOR MIXING AND APPLYING PAINT. QUALITY WORKMANSHIP IS REQUIRED. IN THE ACCEPTANCE OR REJECTION OF FINISH PAINTING, NO ALLOWANCE WILL BE MADE FOR THE PAINTERS' LACK OF SKILL OR IN ADEQUATE LIGHTING DURING PAINTING OPERATIONS.
B. PROVIDE BEST QUALITY GRADE OF VARIOUS TYPES OF COATINGS AS REGULARLY MANUFACTURED BY ACCEPTABLE PAINT MATERIALS MANUFACTURERS. MATERIALS NOT DESIGNATED BY MANUFACTURERS IDENTIFICATION AS A STANDARD, BEST-GRADE PRODUCT WILL NOT BE ACCEPTABLE.
1.3 DELIVERY
A. DELIVER MATERIALS TO JOB SITE IN ORIGINAL, NEW AND UNOPENED PACKAGES AND CONTAINERS BEARING MANUFACTURERS NAME AND LABEL. STORE MATERIALS NOT IN ACTUAL USE IN TIGHTLY COVERED CONTAINERS. MAINTAIN CONTAINERS USED IN STORAGE OF PAINT IN A CLEAN CONDITION, FREE OF FOREIGN MATERIALS AND RESIDUE. KEEP STORAGE AREA NEAT AND ORDERLY. REMOVE RAGS AND WATER DAILY. TAKE ALL PRECAUTIONS TO ENSURE THAT WORKMEN AND WORK ARES ARE ADEQUATELY PROTECTED FROM FIRE HAZARDS AND HEALTH HAZARDS RESULTING FROM HANDLING, MIXING AND APPLICATION OF PAINTS.
1.4 SITE CONDITIONS
A. APPLY PAINTS ONLY WHEN TEMPERATURE OF SURFACES TO BE PAINTED AND SURROUNDING AIR TEMPERATURES ARE WITHIN RECOMMENDED RANGE PERMITTED BY THE PAINT MANUFACTURERS' PRINTED INSTRUCTIONS. DO NOT APPLY PAINT WHEN RELATIVE HUMIDITY EXCEEDS 85%, OR TO DAMP OR WET SURFACES.

PART 2 - PRODUCTS

2.1 GENERAL

- A. PROVIDE PAINT PRODUCTS EQUAL TO MATERIALS LISTED IN THE SCHEDULE.
END OF SECTION 09900

- INCLUDED HEREIN. NOTE THAT PROPRIETARY NAMES USED TO DESIGNATE MATERIALS ARE NOT INTENDED TO IMPLY THAT PRODUCTS OF NAMED MANUFACTURER ARE REQUIRED TO CONTRACT DOCUMENTS.
2.2 FRP PANELS
A. PROVIDE PRIMERS AND UNDERCOAT PAINTS PRODUCED BY THE SAME MANUFACTURER AS THE FINISH COATS. USE ONLY THINNERS APPROVED BY PAINT MANUFACTURER, AND USE ONLY WITHIN RECOMMENDED LIMITS.
CURRENT WRITTEN SAMPLES FOR COLOR, TEXTURE, AND COVERAGE. REMOVE, REFINISH, OR REPAINT WORK NOT IN COMPLIANCE WITH SPECIFIED REQUIREMENTS.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS AND CONDITIONS UNDER WHICH PAINTING WORK IS TO BE APPLIED AND NOTIFY OWNER OF CONDITIONS DETRIMENTAL TO PROPER AND TIMELY COMPLETION OF THE WORK. STARTING OF PAINTING WORK WILL BE CONSTRUED AS ACCEPTANCE OF SURFACES AND CONDITIONS.
3.2 PREPARATION
A. PREPARE SURFACES AND APPLY COATINGS IN STRICT ACCORDANCE WITH THE COATING MANUFACTURERS' RECOMMENDATIONS.
B. CLEAN SURFACES OF DIRT, RUST, SCALE, GREASE, MOISTURE, OR OTHER CONDITIONS OTHERWISE DETRIMENTAL TO FORMATION OF A DURABLE PAINT FILM. PERFORM PREPARATION AND CLEANING PROCEDURES IN ACCORDANCE WITH PAINT MANUFACTURERS' PRINTED INSTRUCTIONS FOR EACH PARTICULAR SUBSTRATE CONDITION.
C. REMOVE HARDWARE, ACCESSORIES, PLATES, LIGHTING FIXTURES, AND SIMILAR ITEMS IN PLACE AND NOT TO BE FINISH-PAINTED, OR PROVIDE SURFACE-APPLIED PROTECTION PRIOR TO PAINTING. REMOVE HARDWARE, ACCESSORIES, AND SIMILAR ITEMS FROM SURFACES TO BE COMPLETELY PAINTED OF ITEMS AND ADJACENT SURFACES. FOLLOWING COMPLETION OF PAINTING OF EACH SPACE OR AREA, REINSTALL REMOVED ITEMS.
D. CLEAN WOOD SURFACES OF DIRT, OIL, AND OTHER FOREIGN SUBSTANCES WITH SOLVENTS TO REMOVE OIL OR MECHANICAL CLEANING METHODS THAT COMPLY WITH RECOMMENDATIONS OF THE STEEL STRUCTURES PAINTING COUNCIL.
E. TOUCH UP SHOP-APPLIED PRIME COATS THAT HAVE BEEN CHIPPED, WIPED OFF, CLEAN WITH SOLVENTS RECOMMENDED BY THE PAINT MANUFACTURER. TOUCH UP WITH THE SAME COATINGS AS THE SURFACE BEING REPAIRED.
H. MATERIALS PREPARATION: CAREFULLY MIX AND PREPARE PAINT MATERIALS IN ACCORDANCE WITH MANUFACTURERS' DIRECTIONS. MAINTAIN CONTAINER USED FOR MIXING AND APPLICATION OF PAINT IN A CLEAN CONDITION. FREE OF FOREIGN MATERIALS AND CONTAMINANTS. CLEAN MIXING AND APPLICATION TOOLS. DO NOT STRIP SURFACE TOOLS TO DENSITY. STRIP AS REQUIRED DURING APPLICATION. DO NOT STRIP SURFACE TOOLS TO MATERIAL. REMOVE FILM IF, IF NECESSARY, STRAIN MATERIAL BEFORE USING. USE ONLY THINNERS APPROVED BY THE PAINT MANUFACTURER, CONSISTENTLY WITH THE RECOMMENDED LIMITS.

3.2 APPLICATION

- A. APPLY PAINT IN ACCORDANCE WITH MANUFACTURERS' DIRECTIONS. USE APPLICATORS AND TECHNIQUES BEST SUITED TO SUBSTRATE AND TYPE OF MATERIAL BEING APPLIED. DO NOT PAINT OVER DIRT, RUST, SLAG, GREASE, MOISTURE, SCUFFED SURFACES, OR OTHER DEFECTIVE SURFACES.
B. SCHEDULING: APPLY FIRST COAT TO CLEANED SURFACES THAT HAVE BEEN CLEANED, PREPARED, AND/OR OTHERWISE PREPARED FOR PAINTING AS SOON AS PRACTICABLE AFTER PREPARATION AND BEFORE SUBSTRATE SURFACE DETERIORATION. ALLOW SUFFICIENT TIME BETWEEN SUCCESSFUL COATINGS TO PERMIT PROPER DRYING. DO NOT RECOAT UNTIL TOIL THAT THUMB PRESSURE, AND APPLICATION OF ANOTHER COAT OF PAINT DOES NOT CAUSE RUBBING OR LOSS OF ADHESION OF THE UNDERCOAT.
C. APPLY PAINT TO COMPLETELY COVER PREVIOUSLY PAINTED SURFACES, TO PROVIDE AN UNIFORM FINISH. UNIFORM COLOR, APPEARANCE AND COVERAGE.
D. CLOUDINESS: SPOTTING, HOLIDAYS, LAP MARKS, BRUSH MARKS, RUNS, SAGS, ROPINESS OR OTHER SURFACE IMPERFECTIONS WILL NOT BE ACCEPTABLE.
E. THE NUMBER OF COATS AND FILM THICKNESS REQUIRED IS THE SAME REGARDLESS OF THE APPLICATION METHOD. DO NOT APPLY SUCCESSIVE COATS UNTIL THE PREVIOUS COAT HAS CURED AS RECOMMENDED BY THE MANUFACTURER. SAND BETWEEN APPLICATIONS WHERE SANDING IS REQUIRED TO PRODUCE AN EVEN SMOOTH SURFACE IN ACCORDANCE WITH THE MANUFACTURERS' DIRECTIONS.
F. APPLY ADDITIONAL PAINT COATS WHEN UNDERCOATS, STAINS OR OTHER CONDITIONS SHOW THROUGH. APPLY UNIFORM FILMS OF UNIFORM FINISH, COLOR AND APPEARANCE. GIVE SPECIAL ATTENTION TO INSURE THAT SURFACES, INCLUDING EDGES, CORNERS, CREVICES, AND EXPOSED FASTENERS RECEIVE A DRY FILM THICKNESS EQUIVALENT TO THAT OF FLAT SURFACES.
G. PAINT INTERIOR SURFACES OF DUCTS, WHERE VISIBLE THROUGH REGISTERS OR GRILLES WITH A FLAT, NONSPARKING BLACK PAINT. PAINT BACK SIDES OF ACCESS PANELS WITH A FLAT, NONSPARKING BLACK PAINT.
H. MINIMUM COATING THICKNESS: APPLY MATERIALS AT NOT LESS THAN THE MANUFACTURERS' RECOMMENDED SPREADING RATE. PROVIDE A TOTAL DRY FILM THICKNESS OF THE ENTIRE SYSTEM AS RECOMMENDED BY THE MANUFACTURER.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. EXAMINE AREAS AND CONDITIONS UNDER WHICH WALL SURFACE PROTECTION COMPONENTS AND ALL PROTECTION SYSTEMS WILL BE INSTALLED. COMPLETE ALL FINISHING OPERATIONS INCLUDING PAINTING, BEFORE BEGINNING INSTALLATION OF WALL SURFACE PROTECTION SYSTEM MATERIALS.
3.2 PREPARATION
A. PREPARATION: PRIOR TO INSTALLATION, CLEAN SUBSTRATE TO REMOVE DUST, DEBRIS, AND LOOSE PARTICLES.
B. INSTALLATION OF WALL SURFACE PROTECTION UNITS PLUMB, LEVEL, AND TRUE TO LINE WITHOUT DISTORTIONS. DO NOT USE MATERIALS WITH CHIPS, CRACKS, VOIDS, STAINS, OR OTHER DEFECTS THAT MIGHT BE VISIBLE IN THE FINISHED WORK. INSTALL RETAINERS, MOUNTING BRACKETS, AND OTHER ACCESSORIES IN STRICT ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS.
B. INSTALLATION OF FRP PANELING:
1. PREPARATION: ACCLIMATE PANELS IN TEMPERATURE AND HUMIDITY CONDITIONS APPROXIMATING THOSE AT THE PROJECT SITE FOR NOT LESS THAN 24 HOURS BEFORE APPLICATION. LAY PANELS FLAT. DO NOT STACK ON FRESH CONCRETE FLOORS OR OTHER SURFACES THAT EMIT MOISTURE. WALLS MUST BE DRY AND FREE FROM DIRT, DUST AND GREASE. REMOVE SWITCHPLATES, WALL PLATES, AND SURFACE-MOUNTED FIXTURES IN AREAS WHERE PANELS ARE TO BE APPLIED.
2. PANEL FITTING: POSITION PANELS WITH 1/4" GAP AT CEILING AND FLOOR, AND 1/8" GAP BETWEEN EACH PANEL AND DIVISION BAR OF MOLDINGS TO ALLOW FOR NORMAL EXPANSION AND CONTRACTION. ALLOW NOT LESS THAN 1/8" GAP AROUND PIPES, ELECTRICAL FITTINGS, AND OTHER PROJECTIONS. USE CARBIDE-TIPPED POWER SAWS TO CUT PANELS. PREFIT EACH PANEL BEFORE INSTALLING.
3. INSTALL PANELS: USING MARLITE M-50 C-375 ADHESIVE (OR MARLITE C-51 ADHESIVE WHERE SOLVENT VAPORS CANNOT BE ADEQUATELY VENTILATED) TO BACK OF PANELS FOR 100% COVERAGE, WITH A NOTCHED TROWEL. BEFORE ADHESIVE SKINS OVER, SET PANELS IN POSITION AND PRESS AGAINST WALL. FULL ENTIRE PANEL BACK AWAY FROM WALL BY 1/2" TO 1/4" TO FLASH OFF SOLVENTS. PRESS BACK IN PLACE. APPLY ADEQUATE PRESSURE TO MAKE FULL CONTACT BETWEEN PANEL AND WALL.
4. PANEL MATCHING: PROVIDE MATCHING TRIM AND PANEL MOLDINGS AT ALL JOINTS BETWEEN PANELS, AND AT TOP AND BOTTOM EDGES OF PANELS. INSTALL MOLDINGS WITH CONTINUOUS BEAD OF SILICONE SEALANT DURING INSTALLATION OF PANELS. SEAL JOINTS BETWEEN MOLDINGS AND BETWEEN MOLDING AND ADJACENT FINISH MATERIAL.