M.INSTALL TRIM FASCIA BOARDS TO RAFTER TAILS OR TO SUB FASCIA.

2.8 FINISHING

FOR FIELD FINISHES:
A. FINISH UNPRIMED SIDING WITH A MINIMUM ONE COAT HIGH QUALITY, ALKALI RESISTANT PRIMER AND ONE COAT OF EITHER, 100 PERCENT ACRYLIC OR LATEX OR OIL BASED, EXTERIOR GRADE TOPCOATS OR TWO COATS HIGH QUALITY ALKALI RESISTANT 100 PERCENT ACRYLIC OR LATEX, EXTERIOR GRADE TOPCOAT WITHIN 90 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.
B. FINISH FACTORY PRIMED SIDING WITH A MINIMUM OF ONE COAT OF HIGH QUALITY 100 PERCENT ACRYLIC OR LATEX OR OIL BASED EXTERIOR GRADE PAINT WITHIN 180 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.

2.9 PROTECTION

A. Protect installed products until completion of project.
B. Touch-up, repair or replace damaged products before Substantial Completion.
C.
END OF SECTION

SECTION 07 54 00 - THERMOPLASTIC MEMBRANE ROOFING

1.1 SUMMARY

A. MECHANICALLY FASTENED MEMBRANE ROOFING SYSTEM.
B. VAPOR RETARDER.
C. ROOF INSULATION.

1.2 SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED.
B. SHOP DRAWINGS: FOR ROOFING SYSTEM. INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
1. BASE FLASHINGS AND MEMBRANE TERMINATIONS.
2. TAPERED INSULATION, INCLUDING SLOPES.
3. INSULATION FASTENING PATTERNS.
C. INSTALLER CERTIFICATES: SIGNED BY ROOFING SYSTEM MANUFACTURER CERTIFYING THAT INSTALLER IS APPROVED, AUTHORIZED, OR LICENSED BY MANUFACTURER TO INSTALL ROOFING SYSTEM.
D. MANUFACTURER CERTIFICATES: SIGNED BY ROOFING MANUFACTURER CERTIFYING THAT ROOFING SYSTEM COMPLIES WITH REQUIREMENTS SPECIFIED IN "PERFORMANCE REQUIREMENTS" ARTICLE.
1. SUBMIT EVIDENCE OF MEETING PERFORMANCE REQUIREMENTS.
E. QUALIFICATION DATA: FOR INSTALLER AND MANUFACTURER.
F. PRODUCT TEST REPORTS: BASED ON EVALUATION OF COMPREHENSIVE TESTS PERFORMED BY MANUFACTURER AND WITNESSED BY A QUALIFIED TESTING AGENCY, FOR COMPONENTS OF ROOFING SYSTEM.
G. WARRANTIES: SPECIAL WARRANTIES SPECIFIED IN THIS SECTION.

1.3 QUALITY ASSURANCE

A. EXTERIOR FIRE-TEST EXPOSURE: CLASS A.

1.4 WARRANTY

A. MANUFACTURER'S MATERIALS AND WORKMANSHIP WARRANTY: 15 YEARS.
B. INSTALLER'S WARRANTY: TWO YEARS.

1.5 MATERIALS

A. THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE: WHITE, FABRIC-REINFORCED THERMOPLASTIC SHEET, 60 MILS (1.5 MM) THICK.
1. SLOPES LESS THAN OR EQUAL TO 2:12, MIN. SOLAR REFLECTANCE INDEX OF 79.
2. SLOPES GREATER THAN 2:12, MIN. SOLAR REFLECTANCE INDEX OF 29.
B. SHEET FLASHING: UNREINFORCED THERMOPLASTIC POLYOLEFIN, 60 MILS (1.5 MM) THICK.
C. SUBSTRATE BOARD: PERLITE BOARD, MIN 1/2" THICK.
D. VAPOR RETARDER: POLYETHYLENE.
E. ROOF INSULATION: POLYISOCYANURATE BOARD.
1. JOHNS MANVILLE INTERNATIONAL, INC.; ENRGY 3
2. MINIMUM RECYCLED CONTENT: 30% POST-CONSUMER.
3. TAPERED BOARDS: 1/4 INCH PER 12 INCHES(1:48).
F. WALKWAYS: PROVIDE WHERE SHOWN ON ROOF PLANS AND AS REQUIRED BY ROOFING MANUFACTURER.

1.6 INSTALLATION
A. ROOF INSULATION: MECHANICALLY FASTENED.
B. ROOFING MEMBRANE: MECHANICALLY FASTENED.
1. ATTACHMENT METHOD FOR MECHANICALLY FASTENED**:** THROUGH MEMBRANE.

END OF SECTION 07540

SECTION 07620 – SHEET METAL FLASHING AND TRIM

PART 1.GENERAL

1.01 SECTION INCLUDES

A. COPING, PARAPET CAP, ROOF, AND SILL FLASHINGS.
B. FASCIAS AND SCUPPERS.
C. COUNTERFLASHINGS OVER BASE FLASHINGS, ROOF MOUNTED EQUIPMENT & VENT STACKS.

1.02QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH THE FOLLOWING:
1. NRCA (NATIONAL ROOFING CONTRACTORS ASSOCIATION) - ROOFING MANUAL.

1.03 STORAGE AND HANDLING

A. STACK PREFORMED AND PREFINISHED MATERIAL TO PREVENT TWISTING, BENDING, OR ABRASION, AND TO PROVIDE VENTILATION.

PART 2PRODUCTS

2.01SHEET MATERIALS

A. PRE-COATED GALVANIZED STEEL: ASTM A446, GRADE A, G90 & 24 GAUGE CORE STEEL, SHOP PRE-COATED SELECTED COLOR.
B. GALVANIZED STEEL: ASTM A446, GRADE A, G90 & 24 GAUGE CORE STEEL.
C. ALUMINUM SHEET: ASTM B209, 3003 ALLOY, H14 TEMPER & .040 INCH THICK & SHOP PRECOATED WITH SELECTED COLOR.

2.02ACCESSORIES

A. FASTENERS: SAME MATERIAL AND FINISH AS FLASHING METAL.
B. UNDERLAYMENT: NO. 15# ASPHALT SATURATED ROOFING FELT & ICE & WATER SHIELD AS INDICATED ON DRAWINGS, AND UP FROM ROOF EAVE TO MIN. OF 12" PAST THE WARM WALL, OR 36" WHICHEVER IS GREATER.

2.03FABRICATION

A. FORM COMPONENTS TRUE TO SHAPE, ACCURATE IN SIZE, SQUARE, AND FREE FROM DISTORTION OR DEFECTS. FORM PIECES IN LONGEST PRACTICAL LENGTHS.
B. FABRICATE CLEATS AND STARTER STRIPS OF SAME MATERIAL AS SHEET, INTERLOCKABLE WITH SHEET.
C. HEM EXPOSED EDGES ON UNDERSIDE 1/2 INCH & MITER AND SEAM CORNERS. FABRICATE VERTICAL FACES WITH BOTTOM EDGE FORMED OUTWARD 1/4 INCH AND HEMMED TO FORM DRIP.
D. FABRICATE FLASHINGS TO ALLOW TOE TO EXTEND 2 INCHES OVER ROOFING. RETURN AND BRAKE EDGES.
E. FORM MATERIAL WITH STANDING SEAM.
F. FABRICATE CORNERS IN ONE PIECE & SEAM FOR RIGIDITY, SEAL WITH SEALANT.
G. FORM SHEET METAL PANS WITH UPSTAND AND FLANGES. FILL PANS WATERTIGHT WITH PLASTIC CEMENT.

PART 3EXECUTION

3.01 EXAMINATION AND PREPARATION

A. VERIFY ROOF OPENINGS, CURBS, PIPES, SLEEVES, DUCTS, OR VENTS THROUGH ROOF ARE SOLIDLY SET, CANT STRIPS AND REGLETS IN PLACE, AND NAILING STRIPS LOCATED.
B. VERIFY MEMBRANE TERMINATION AND BASE FLASHINGS ARE IN PLACE, SEALED, AND SECURE.

3.02INSTALLATION

A. INSTALL STARTER AND EDGE STRIPS, AND CLEATS.
B. SECURE FLASHINGS, GUTTERS AND DOWNSPOUTS IN PLACE USING CONCEALED FASTENERS.
C. APPLY PLASTIC CEMENT COMPOUND BETWEEN METAL WORK AND FELT FLASHINGS.
D. FIT COMPONENTS TIGHT IN PLACE. MAKE CORNERS SQUARE, SURFACES TRUE AND STRAIGHT IN PLANES, AND LINES ACCURATE TO PROFILES.
E. SEAL METAL JOINTS WATERTIGHT.

END OF SECTION

SECTION O7 90 00 – SEALANT AND CAULKING

PART 1.GENERAL

1.01SECTION INCLUDES

A. PREPARING SEALANT SUBSTRATE SURFACES.
B. SEALANT AND JOINT BACKING.

1.02SYSTEM DESCRIPTION

A. SYSTEM PERFORMANCE TO ACHIEVE MOISTURE AND AIR TIGHT JOINT SEALS.

1.03QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH SEALANT MANUFACTURER'S REQUIREMENTS FOR PREPARATION OF SURFACES AND MATERIAL INSTALLATION INSTRUCTIONS.

1.04ENVIRONMENTAL REQUIREMENTS

A. MAINTAIN TEMPERATURE AND HUMIDITY RECOMMENDED BY THE SEALANT MANUFACTURER DURING AND AFTER INSTALLATION.

PART 2 PRODUCTS

2.01 SEALANTS

A. SILICONE SEALANT: ASTM C920 & SINGLE COMPONENT, SOLVENT CURING, NON-SAGGING, NON-STAINING, FUNGUS RESISTANT, NON-BLEEDING & COLOR AS SELECTED.
1. ELONGATION CAPABILITY: 25 PERCENT
2. SERVICE TEMPERATURE RANGE: -65 TO 180 DEGREES F
3. SHORE A HARDNESS RANGE: 15 TO 35

2.02ACCESSORIES

A.PRIMER: NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION.

B. JOINT CLEANER: NON-CORROSIVE AND NON-STAINING TYPE, RECOMMENDED BY SEALANT MANUFACTURER & COMPATIBLE WITH JOINT FORMING MATERIALS.
C. JOINT BACKING: ASTM D1056 & ROUND, CLOSED CELL FOAM ROD & OVERSIZED 30 TO 50 PERCENT LARGER THAN JOINT WIDTH.
D. BOND BREAKER: PRESSURE SENSITIVE TAPE RECOMMENDED BY SEALANT MANUFACTURER TO SUIT APPLICATION.

PART 3 EXECUTION

3.01 EXAMINATION AND PREPARATION

A. VERIFY THAT SUBSTRATE SURFACES AND JOINT OPENINGS ARE READY TO RECEIVE WORK.
B. REMOVE LOOSE MATERIALS AND FOREIGN MATTER WHICH MIGHT IMPAIR ADHESION OF SEALANT.
C. VERIFY THAT JOINT BACKING AND RELEASE TAPES ARE COMPATIBLE WITH SEALANT.
D. PERFORM PREPARATION IN ACCORDANCE WITH ASTM C1193 - 16 FOR LATEX BASE SEALANTS.

3.02 INSTALLATION

A. CLEAN JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. INSTALL SEALANT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
C. MEASURE JOINT DIMENSIONS AND SIZE MATERIALS TO ACHIEVE REQUIRED WIDTH/DEPTH RATIOS.
D. INSTALL JOINT BACKING TO ACHIEVE A NECK DIMENSION NO GREATER THAN 1/3 THE JOINT WIDTH.
E. INSTALL BOND BREAKER WHERE JOINT BACKING IS NOT USED.
F. APPLY SEALANT WITHIN RECOMMENDED APPLICATION TEMPERATURE RANGES. CONSULT MANUFACTURER WHEN SEALANT CANNOT BE APPLIED WITHIN THESE TEMPERATURE RANGES.
G. TOOL JOINTS AS REQUIRED.

SECTION 07 84 43 - JOINT FIRESTOPPING

PART 1 GENERAL

1. SUMMARY

A. SECTION INCLUDES:
1) JOINTS IN OR BETWEEN FIRE-RESISTANCE-RATED CONSTRUCTIONS.
2) JOINTS AT EXTERIOR CURTAIN-WALL/FLOOR INTERSECTIONS.
3) JOINTS IN SMOKE BARRIERS.

2. PREINSTALLATION MEETINGS

A. PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT **PROJECT SITE**.

3. ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. PRODUCT SCHEDULE: FOR EACH JOINT FIRESTOPPING SYSTEM. INCLUDE LOCATION, ILLUSTRATION OF FIRESTOPPING SYSTEM, AND DESIGN DESIGNATION OF QUALIFIED TESTING AGENCY.
1) ENGINEERING JUDGMENTS: WHERE PROJECT CONDITIONS REQUIRE MODIFICATION TO A QUALIFIED TESTING AGENCY'S ILLUSTRATION FOR A PARTICULAR JOINT FIRESTOPPING SYSTEM CONDITION, SUBMIT ILLUSTRATION, WITH MODIFICATIONS MARKED, APPROVED BY JOINT FIRESTOPPING SYSTEM MANUFACTURER'S FIRE-PROTECTION ENGINEER AS AN ENGINEERING JUDGMENT OR EQUIVALENT FIRE-RESISTANCE-RATED ASSEMBLY.

4. INFORMATIONAL SUBMITTALS

A. PRODUCT TEST REPORTS.

5. CLOSEOUT SUBMITTALS

A. INSTALLER CERTIFICATES: FROM INSTALLER INDICATING THAT JOINT FIRESTOPPING SYSTEMS HAVE BEEN INSTALLED IN COMPLIANCE WITH REQUIREMENTS AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

6. QUALITY ASSURANCE

A. INSTALLER QUALIFICATIONS: A FIRM THAT HAS BEEN APPROVED BY FM GLOBAL ACCORDING TO FM GLOBAL 4991, "APPROVAL OF FIRESTOP CONTRACTORS," OR BEEN EVALUATED BY UL AND FOUND TO COMPLY WITH UL'S "QUALIFIED FIRESTOP CONTRACTOR PROGRAM REQUIREMENTS."

PART 2 PRODUCTS

1. PERFORMANCE REQUIREMENTS

2. JOINT FIRESTOPPING SYSTEMS

A. JOINT FIRESTOPPING SYSTEMS: SYSTEMS THAT RESIST SPREAD OF FIRE, PASSAGE OF SMOKE AND OTHER GASES, AND MAINTAIN ORIGINAL FIRE-RESISTANCE RATING OF ASSEMBLIES IN OR BETWEEN WHICH JOINT FIRESTOPPING SYSTEMS ARE INSTALLED. JOINT FIRESTOPPING SYSTEMS SHALL ACCOMMODATE BUILDING MOVEMENTS WITHOUT IMPAIRING THEIR ABILITY TO RESIST THE PASSAGE OF FIRE AND HOT GASES.
B. JOINTS IN OR BETWEEN FIRE-RESISTANCE-RATED CONSTRUCTION: PROVIDE JOINT FIRESTOPPING SYSTEMS WITH RATINGS DETERMINED PER ASTM E 1966 OR UL 2079.
1) MANUFACTURER AND INSTALLER SHALL EACH HAVE MIN OF (5) FIVE YEARS EXPERIENCE IN MANUFACTURE AND INSTALLATION OF FIRE STOPPING SYSTEMS.
2) FIRE-RESISTANCE RATING: EQUAL TO OR EXCEEDING THE FIRE-RESISTANCE RATING OF THE WALL, FLOOR, OR ROOF IN OR BETWEEN WHICH IT IS INSTALLED.
C. JOINTS IN SMOKE BARRIERS: PROVIDE FIRE-RESISTIVE JOINT SYSTEMS WITH RATINGS DETERMINED PER UL 2079 BASED ON TESTING AT A POSITIVE PRESSURE DIFFERENTIAL OF 0.30-INCH WG (74.7 PA).
1) L-RATING: NOT EXCEEDING 5.0 CFM/FT. (0.00775 CU. M/S X M) OF JOINT AT BOTH AMBIENT AND ELEVATED TEMPERATURES.
D. EXPOSED JOINT FIRESTOPPING SYSTEMS: FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES OF LESS THAN 25 AND 450, RESPECTIVELY, AS DETERMINED PER ASTM E 84.
E. ACCESSORIES: PROVIDE COMPONENTS OF FIRE-RESISTIVE JOINT SYSTEMS, INCLUDING PRIMERS AND FORMING MATERIALS, THAT ARE NEEDED TO INSTALL ELASTOMERIC FILL MATERIALS AND TO MAINTAIN RATINGS REQUIRED. USE ONLY COMPONENTS SPECIFIED BY JOINT FIRESTOPPING SYSTEM MANUFACTURER AND APPROVED BY THE QUALIFIED TESTING AGENCY FOR CONDITIONS INDICATED.

PART 3 EXECUTION

1. INSTALLATION

A. EXAMINE SUBSTRATES AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR JOINT CONFIGURATIONS, SUBSTRATES, AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
B. GENERAL: INSTALL FIRE-RESISTIVE JOINT SYSTEMS TO COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND PUBLISHED DRAWINGS FOR PRODUCTS AND APPLICATIONS INDICATED.
C. INSTALL FORMING MATERIALS AND OTHER ACCESSORIES OF TYPES REQUIRED TO SUPPORT ELASTOMERIC FILL MATERIALS DURING THEIR APPLICATION AND IN POSITION NEEDED TO PRODUCE CROSS-SECTIONAL SHAPES AND DEPTHS REQUIRED TO ACHIEVE FIRE RATINGS INDICATED.
1) AFTER INSTALLING ELASTOMERIC FILL MATERIALS AND ALLOWING THEM TO FULLY CURE, REMOVE COMBUSTIBLE FORMING MATERIALS AND OTHER ACCESSORIES NOT INDICATED AS PERMANENT COMPONENTS OF FIRE-RESISTIVE JOINT SYSTEM.
D. INSTALL ELASTOMERIC FILL MATERIALS FOR FIRE-RESISTIVE JOINT SYSTEMS BY PROVEN TECHNIQUES TO PRODUCE THE FOLLOWING RESULTS:
1) ELASTOMERIC FILL VOIDS AND CAVITIES FORMED BY JOINTS AND FORMING MATERIALS AS REQUIRED TO ACHIEVE FIRE-RESISTANCE RATINGS INDICATED.
2) APPLY ELASTOMERIC FILL MATERIALS SO THEY CONTACT AND ADHERE TO SUBSTRATES FORMED BY JOINTS.
3) FOR ELASTOMERIC FILL MATERIALS THAT WILL REMAIN EXPOSED AFTER COMPLETING THE WORK, FINISH TO PRODUCE SMOOTH, UNIFORM SURFACES THAT ARE FLUSH WITH ADJOINING FINISHES.

2. IDENTIFICATION

3. FIELD QUALITY CONTROL

A. PROCEED WITH ENCLOSING JOINT FIRESTOPPING SYSTEMS WITH OTHER CONSTRUCTION ONLY AFTER ACCEPTANCE OF AUTHORITY HAVING JURISDICTION REVIEW OF FIELD INSTALLATIONS COMPLY WITH THEIR REQUIREMENTS.

END OF SECTION

DIVISION 8 OPENINGS

SECTION 08 41 00 – ALUMINUM STOREFRONT WINDOWS

PART 1. GENERAL

1.01 SECTIONS INCLUDES

A. ALUMINUM WINDOW FRAMES

1.02 SYSTEM DESCRIPTION

A. SYSTEM PERFORMANCE TO PROVIDE FOR EXPANSION AND CONTRACTION WITHIN SYSTEM COMPONENTS CAUSED BY TEMPERATURE CYCLING.
B. LIMIT AIR LEAKAGE THROUGH ASSEMBLY TO 0.06 CFM/MIN/SQ FT OF WALL AREA, MEASURED AT A REFERENCE DIFFERENTIAL PRESSURE ACROSS ASSEMBLY OF 1.57 PSF AS MEASURED IN ACCORDANCE WITH AAMA 501 ASTM E283.
C. WATER LEAKAGE: NONE, WHEN MEASURED IN ACCORDANCE WITH AAMA 501 AND ASTM E331, WITH A TEST PRESSURE DIFFERENCE OF 2.86 LBS/SQ FT.
D. DESIGN AND SIZE MEMBERS TO WITHSTAND DEAD LOADS CAUSED BY PRESSURE AND SUCTION OF WIND.
E. DRAIN WATER ENTERING THE FRAMING SYSTEM TO EXTERIOR.

1.03 WARRANTY

A. PROVIDE FIVE YEAR WARRANTY.

PART 2 PRODUCTS

2.01 MATERIALS

A. EXTRUDED ALUMINUM: ASTM B221-14 54T & 6063-T5 ALLOY, G.S.10A-T5 TEMPER.
B. SHEET ALUMINUM: ASTM B209-14 54T & 6063-T5 ALLOY, G.S.10A-T5 TEMPER.
C. SHEET STEEL: ASTM A446 - 76(1981)e1.
D. FASTENERS: STAINLESS STEEL.
E. SEALANT AND BACKING MATERIALS: AS SPECIFIED IN SECTION 07 90 00

2.02 FABRICATED COMPONENTS

A. FRAMES: 1-3/4" X 4-1/2" THERMALLY BROKEN WITH GLAZING STOPS.
B. FLASHINGS: ALUMINUM OR GALVANIZED STEEL, FINISH TO MATCH MULLION SECTIONS WHERE EXPOSED.
C. PRE-FABRICATED HORIZONTAL SLIDING WINDOW.

2.03GLASS AND GLAZING MATERIALS

A. GLASS AND GLAZING MATERIALS: AS SPECIFIED IN SECTION 08800.

2.04 FABRICATION

A. FABRICATE FRAMES ALLOWING FOR MINIMUM CLEARANCES AND SHIM SPACING AROUND PERIMETER OF ASSEMBLY.
B. ACCURATELY AND RIGIDLY FIT AND SECURE JOINTS AND CORNERS SO THAT THEY ARE FLUSH, HAIRLINE TIGHT, AND WEATHERPROOF.
C. ARRANGE FASTENERS, ATTACHMENTS AND JOINTING TO ENSURE CONCEALMENT FROM VIEW.
D. PREPARE COMPONENTS WITH INTERNAL REINFORCEMENT FOR DOOR HARDWARE.

2.06FINISHES

A. EXTERIOR ALUMINUM SURFACES: KYNAR FINISH - ARCHITECT TO SELECT COLOR
B. INTERIOR ALUMINUM SURFACES: KYNAR FINISH - ARCHITECT TO SELECT COLOR
C. APPLY BITUMINOUS PAINT TO CONCEALED ALUMINUM SURFACES IN CONTACT WITH CEMENTITIOUS OR DISSIMILAR MATERIALS.

3.01 EXAMINATION AND PREPARATION

A.VERIFY THAT WALL OPENINGS AND ADJOINING AIR AND VAPOR SEAL MATERIALS ARE READY TO RECEIVE WORK OF THIS SECTION.

3.02 INSTALLATION

A. INSTALL FRAMES, GLAZING AND FLASHINGS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
B. USE THE APPROPRIATE ANCHORAGE DEVICES TO SECURELY ATTACH FRAME ASSEMBLY TO STRUCTURE.
C. ALIGN ASSEMBLY PLUMB AND LEVEL, FREE OF WARP OR TWIST. MAINTAIN ASSEMBLY DIMENSIONAL TOLERANCES, ALIGNING WITH ADJACENT WORK AS SHOWN ON THE DRAWINGS.
D. COORDINATE ATTACHMENT AND SEAL OF AIR AND VAPOR BARRIER MATERIALS. PACK FIBROUS INSULATION IN SHIM SPACES AT PERIMETER OF ASSEMBLY TO MAINTAIN CONTINUITY OF THERMAL BARRIER.
E. INSTALL GLASS IN ACCORDANCE WITH SECTION 08 80 00, USING EXTERIOR METHOD OF GLAZING.
F. INSTALL PERIMETER TYPE SEALANT, BACKING MATERIALS, AND INSTALLATION REQUIREMENTS IN ACCORDANCE WITH SECTION 07 90 00.

SECTION 08 71 00 – FINISH HARDWARE

PART 1. GENERAL

1.1 SUMMARY

A. SECTION INCLUDES:
1. DOOR HARDWARE, INCLUDING ELECTRIC HARDWARE.
2. STOREFRONT AND ENTRANCE DOOR HARDWARE.
3. CYLINDERS FOR DOORS FABRICATED WITH LOCKING HARDWARE.
4. KEY CABINETS, KEY MANAGEMENT SOFTWARE.
B. RELATED SECTIONS:
1. SECTION 06200 - FINISH CARPENTRY: FINISH HARDWARE INSTALLATION.
2. SECTION 07 90 00 - JOINT SEALERS - EXTERIOR THRESHOLDS.
3. SECTION 08 11 00 - METAL DOORS AND FRAMES.
4. SECTION 08 14 00 - WOOD AND SECTION 08 15 00 PLASTIC DOORS.
5. SECTION 21 00 00 - FIRE/LIFE-SAFETY SYSTEM.
C. SPECIFIC OMISSIONS: HARDWARE FOR THE FOLLOWING IS SPECIFIED OR INDICATED ELSEWHERE.
1. WINDOWS.
2. CABINETS, INCLUDING OPEN WALL SHELVING AND LOCKS.
3. SIGNS, EXCEPT WHERE SCHEDULED.
4. TOILET ACCESSORIES, INCLUDING GRAB BARS.
5. INSTALLATION.
6. ROUGH HARDWARE.
7. FOLDING PARTITIONS, EXCEPT CYLINDERS WHERE DETAILED.
8. SLIDING ALUMINUM DOORS, EXCEPT CYLINDERS WHERE DETAILED.
9. ACCESS DOORS AND PANELS, EXCEPT CYLINDERS WHERE DETAILED.
10. CORNER GUARDS.
11. WROUGHT IRON RAILING, GATES AND SUPPORTS.
12. BRASS RAIL AND DRINK RAIL SUPPORTS.

1.2 REFERENCES:
A. INTERNATIONAL BUILDING CODE 2012
B. AMERICAN NATIONAL STANDARDS INSTITUTE - ANSI 156.18 - MATERIALS AND FINISHES.
C. ANSI A117.1 - SPECIFICATIONS FOR MAKING BUILDINGS AND FACILITIES USABLE BY PHYSICALLY HANDICAPPED PEOPLE.
D. ADA - AMERICANS WITH DISABILITIES ACT OF 1990
E. BHMA - BUILDERS HARDWARE MANUFACTURERS ASSOCIATION
F. DHI - DOOR AND HARDWARE INSTITUTE
G. NFPA - NATIONAL FIRE PROTECTION ASSOCIATION
1. NFPA 80 - FIRE DOORS AND WINDOWS
2. NFPA 101 - LIFE SAFETY CODE
3. NFPA 105 - SMOKE AND DRAFT CONTROL DOOR ASSEMBLIES
4. NFPA 252 - FIRE TESTS OF DOOR ASSEMBLIES
H. UL - UNDERWRITERS LABORATORIES
1. UL10C - FIRE TESTS OF DOOR ASSEMBLIES (POSITIVE PRESSURE)
2. UL 305 - PANIC HARDWARE
I. WHI - WARNOCK HERSEY INCORPORATED
J. SDI - STEEL DOOR INSTITUTE
K. WDI - WOOD DOOR INSTITUTE
L. AWI - ARCHITECTURAL WOODWORK INSTITUTE
M. NAAM - NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS

1.3 SUBMITTALS & SUBSTITUTIONS

A. SUBMITTALS: SUBMIT SIX COPIES OF SCHEDULE PER DIVISION 1, OR EMAIL THE SCHEDULE TO THE ARCHITECT FOR REVIEW. ORGANIZE VERTICALLY FORMATTED SCHEDULE INTO "HARDWARE SETS" WITH INDEX OF DOORS AND HEADINGS, INDICATING COMPLETE DESIGNATIONS OF EVERY ITEM REQUIRED FOR EACH DOOR OR OPENING. INCLUDE FOLLOWING INFORMATION:
1. TYPE, STYLE, FUNCTION, SIZE, QUANTITY AND FINISH OF HARDWARE ITEMS. USE BHMA FINISH CODES PER ANSI A156.18.
2. NAME, PART NUMBER AND MANUFACTURER OF EACH ITEM.
3. FASTENINGS AND OTHER PERTINENT INFORMATION.
4. LOCATION OF HARDWARE SET COORDINATED WITH FLOOR PLANS AND DOOR SCHEDULE.
5. EXPLANATION OF ABBREVIATIONS, SYMBOLS, AND CODES CONTAINED IN SCHEDULE.
6. MOUNTING LOCATIONS FOR HARDWARE.
7. DOOR AND FRAME SIZES, MATERIALS AND DEGREES OF SWING.
8. LIST OF MANUFACTURERS USED AND THEIR NEAREST REPRESENTATIVE WITH ADDRESS AND PHONE NUMBER.
9. CATALOG CUTS.
10. MANUFACTURER'S TECHNICAL DATA AND INSTALLATION INSTRUCTIONS FOR ELECTRONIC HARDWARE.
B. BID AND SUBMIT MANUFACTURER'S UPDATED/IMPROVED ITEM IF SCHEDULED ITEM IS DISCONTINUED.
C. MAKE SUBSTITUTION REQUESTS IN ACCORDANCE WITH DIVISION 1. INCLUDE PRODUCT DATA AND INDICATE BENEFIT TO THE PROJECT. FURNISH OPERATING SAMPLES ON REQUEST.
1. ITEMS LISTED WITH NO SUBSTITUTE MANUFACTURERS HAVE BEEN REQUESTED BY OWNER TO MEET EXISTING STANDARD.
D. FURNISH AS-BUILT/AS-INSTALLED SCHEDULE WITH CLOSEOUT DOCUMENTS, INCLUDING KEYING SCHEDULE, MANUFACTURERS' INSTALLATION, ADJUSTMENT AND MAINTENANCE INFORMATION, AND SUPPLIER'S FINAL INSPECTION REPORT.

1.4 QUALITY ASSURANCE:

A. QUALIFICATIONS:
1. HARDWARE SUPPLIER: DIRECT FACTORY CONTRACT SUPPLIER WHO EMPLOYS A CERTIFIED ARCHITECTURAL HARDWARE CONSULTANT (AHC), AVAILABLE AT REASONABLE TIMES DURING COURSE WORK FOR PROJECT HARDWARE CONSULTATION TO OWNER, ARCHITECT AND CONTRACTOR. (1) RESPONSIBLE FOR DETAILING, SCHEDULING AND ORDERING OF FINISH HARDWARE.
B. HARDWARE: NEW, FREE OF DEFECTS, BLEMISHES AND EXCESSIVE PLAY. OBTAIN EACH KIND OF HARDWARE (LATCH AND LOCKSETS, EXIT DEVICES, HINGES AND CLOSERS) FROM ONE MANUFACTURER.
C. EXIT DOORS: OPERABLE FROM INSIDE WITH SINGLE MOTION WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
D. FIRE-RATED OPENINGS: IN COMPLIANCE WITH NFPA 80. HARDWARE: UL10C (POSITIVE PRESSURE) COMPLIANT FOR GIVEN TYPE/SIZE OPENING AND DEGREE OF LABEL. PROVIDE PROPER LATCHING HARDWARE, NON-FLAMING DOOR CLOSERS, APPROVED-BEARING HINGES, PLUS RESILIENT AND REQUIRED INTUMESCENT SEALS. FURNISH OPENINGS COMPLETE.
1. NOTE: SCHEDULED SEALS MAY EXCEED SELECTED DOOR MANUFACTURER'S REQUIREMENTS.
E. PRE-INSTALLATION MEETINGS: INITIATE AND CONDUCT WITH SUPPLIER, INSTALLER AND RELATED TRADES, COORDINATE MATERIALS AND TECHNIQUES, AND SEQUENCE COMPLEX HARDWARE ITEMS AND SYSTEMS INSTALLATION. CONVENE AT LEAST ONE WEEK PRIOR TO COMMENCEMENT OF RELATED WORK.

1.5 DELIVERY, STORAGE AND HANDLING:

A. DELIVERY: COORDINATE DELIVERY TO APPROPRIATE LOCATIONS (SHOP OR FIELD).
1. PERMANENT KEYS AND CORES: SECURED DELIVERY DIRECT TO OWNER'S REPRESENTATIVE.
B. ACCEPTANCE AT SITE: ITEMS INDIVIDUALLY PACKAGED IN MANUFACTURERS' ORIGINAL CONTAINERS, COMPLETE WITH PROPER FASTENERS AND RELATED PIECES. CLEARLY MARK PACKAGES TO INDICATE CONTENTS, LOCATIONS IN HARDWARE SCHEDULE AND DOOR NUMBERS.
C. STORAGE: PROVIDE LOCKED STORAGE AREA FOR HARDWARE, PROTECT FROM MOISTURE, SUNLIGHT, PAINT, CHEMICALS, ETC...

1.6 PROJECT CONDITIONS:

A. WHERE EXACT TYPES OF HARDWARE SPECIFIED ARE NOT ADAPTABLE TO FINISHED SHAPE OR SIZE OF MEMBERS REQUIRING HARDWARE, PROVIDE SUITABLE TYPES HAVING AS NEARLY AS PRACTICAL AS THE SAME OPERATION AND QUALITY AS TYPE SPECIFIED, SUBJECT TO ARCHITECT'S APPROVAL.

1.7 SEQUENCING AND COORDINATION:

A. COORDINATE WITH CONCRETE.
B. REINFORCE WALLS.
C. COORDINATE FINISH FLOOR MATERIALS AND FLOOR-MOUNTED HARDWARE.
D. FURNISH MANUFACTURER TEMPLATES TO DOOR AND FRAME FABRICATORS.
E. USE HARDWARE CONSULTANT TO CHECK SHOP DRAWINGS FOR DOORS AND ENTRANCES TO CONFIRM THAT ADEQUATE PROVISIONS WILL BE MADE FOR PROPER HARDWARE INSTALLATION.
1. CONFIRM THAT DOOR MANUFACTURERS FURNISH NECESSARY UBC-7-2 COMPLIANT SEAL PACKAGES.

1.8 WARRANTY:

A. PART OF RESPECTIVE MANUFACTURERS' REGULAR TERMS OF SALE. PROVIDE MANUFACTURERS' WARRANTIES:
1. CLOSERS: TEN YEARS MECHANICAL, TWO YEARS ELECTRICAL.
2. EXIT DEVICES: THREE YEARS.
3. HINGES: LIFE OF BUILDING.
4. OTHER HARDWARE: TWO YEARS.

1.9 COMMISSIONING:

A. TEST DOOR HARDWARE OPERATION WITH CLIMATE CONTROL SYSTEM AND STAIRWELL PRESSURIZATION SYSTEM BOTH AT REST AND WHILE IN FULL OPERATION.
B. TEST HARDWARE INTERFACED WITH FIRE/LIFE-SAFETY SYSTEM FOR PROPER OPERATION AND RELEASE.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

A. PROVIDE HARDWARE FROM THE FOLLOWING APPROVED MANUFACTURERS
1. HINGES: IVES, STANLEY, MCKINNEY, BOMMER
2. COMMON SPACE LOCKS: FALCON W SERIES
3. RESIDENCE LOCKS: SCHLAGE F SERIES
4. CYLINDERS AND CORES: FALCON STANDARD 6 PIN
5. EXIT DEVICES: FALCON 24/25 SERIES
6. MECHANICAL DOOR CLOSERS: FALCON SC70/SC80 SERIES
7. AUTOMATIC OPERATORS: LCN 4600 SERIES
8. ACCESSORIES AND TRIM: IVES, ROCKWOOD, TRIMCO
9. WEATHER STRIP & THRESHOLDS: ZERO, NATIONAL GUARD, PEMKO
B. PRODUCT SUBSTITUTIONS ARE SUBJECT TO REVIEW AND APPROVAL OF BOTH THE ARCHITECT AND THE OWNER. SUBSTITUTION REQUESTS SUBMITTED NO LATER THAN TEN (10) DAYS PRIOR TO BID WILL BE REVIEWED AGAINST PREVIOUSLY APPROVED HARDWARE. PRODUCT SUBSTITION APPROVALS WILL BE ISSUED VIA ADDENDUM.
C. PROVIDE HARDWARE ITEMS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THESE SPECIFICATIONS AND MANUFACTURERS' INSTRUCTIONS.
1. INCLUDE ITEMS INADVERTENTLY OMITTED FROM THIS SPECIFICATION. NOTE THESE ITEMS IN SUBMITTAL FOR REVIEW.
2. WHERE SCHEDULED ITEM IS NOW OBSOLETE, BID AND FURNISH MANUFACTURERS UPDATED ITEM AT NO ADDITIONAL COST TO THE PROJECT.

2.2 HANGING MEANS:

A. CONVENTIONAL HINGES: HINGE OPEN WIDTHS MINIMUM, BUT, OF SUFFICIENT THROW TO PERMIT MAXIMUM DOOR SWING. STEEL OR STAINLESS STEEL PINS AND CONCEALED BEARINGS.

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LICENSED ARCHITECT
JEFFREY NIELSEN BYERS
No. 7272045
STATE OF UTAH

Sept. 23, 2016

CONSULTANT:

T.C. ENTERPRISE
OWNER:

PARDOE ASSISTED LIVING - MIDVALE
6968 SOUTH 700 WEST
MIDVALE, UTAH 84095
PROJECT:

DATE	DESCRIPTION
6/29/2016	CITY SUBMITTAL
9/9/2016	CITY COMMENTS

SPECIFICATIONS
PROJECT #: 14-288.01
DRAWN BY: Author
CHECKED BY: Checker
SHEET #
G014

1. THREE HINGES PER LEAF TO 7 FOOT, 6 INCH HEIGHT. ADD ONE FOR EACH ADDITIONAL 30 INCHES IN HEIGHT, OR ANY FRACTION THEREOF.
2. EXTRA HEAVY WEIGHT HINGES ON DOORS OVER 3 FOOT, 5 INCHES IN WIDTH.
3. OUTSWINGING EXTERIOR DOORS: NON-FERROUS WITH NON-REMOVABLE (NRP) PINS.
4. NON-FERROUS MATERIAL EXTERIORS AND AT DOORS SUBJECT TO CORROSIVE ATMOSPHERIC CONDITIONS.
5. PROVIDE SHIMS AND SHIMMING INSTRUCTIONS FOR PROPER DOOR ADJUSTMENT.

2.3 LOCKSETS, LATCHSETS, DEADBOLTS:

A. EXTRA HEAVY DUTY CYLINDRICAL LOCKS AND LATCHES: AS SCHEDULED.
1. CHASSIS: CYLINDRICAL DESIGN, CORROSION-RESISTANT PLATED COLD-ROLLED STEEL, THROUGH-BOLTED.
2. LOCKING SPINDLE: STAINLESS STEEL, INTERLOCKING DESIGN.
3. LATCH RETRACTORS: FORGED STEEL. BALANCE OF INNER PARTS: CORROSION-RESISTANT PLATED STEEL, OR STAINLESS STEEL.
4. LEVER TRIM: ACCESSIBLE DESIGN, INDEPENDENT OPERATION, SPRING-CAGE SUPPORTED, MINIMUM 2" CLEARANCE FROM LEVER MID-POINT TO DOOR FACE.
5. ELECTRIC OPERATION: MANUFACTURER-INSTALLED CONTINUOUS DUTY SOLENOID.
6. STRIKES: 16 GAGE CURVED STEEL, BRONZE OR BRASS WITH 1" DEEP BOX CONSTRUCTION, LIPS OF SUFFICIENT LENGTH TO CLEAR TRIM AND PROTECT CLOTHING.
7. LOCK SERIES AND DESIGN: SCHLAGE D SERIES, "SPARTA" DESIGN.
8. CERTIFICATIONS:
9. ANSI A156.2, 1994, SERIES 4000, GRADE 1.
10. UL LISTED FOR A LABEL AND LESSER CLASS SINGLE DOORS UP TO 4FT X 8FT.

2.4 EXIT DEVICES/PANIC HARDWARE

A. GENERAL FEATURES:
1. INDEPENDENT LAB-TESTED 1,000,000 CYCLES.
2. PUSH-THROUGH TOUCH PAD DESIGN. NO EXPOSED TOUCH BAR FASTENERS, NO EXPOSED CAVITIES WHEN OPERATED. RETURN STROKE FLUID DAMPENERS AND RUBBER BOTTOMING DAMPENERS, PLUS ANTI-RATTLE DEVICES.
3. 3/4" THROW DEADLOCKING LATCHBOLTS.
4. NO EXPOSED SCREWS TO SHOW THROUGH GLASS DOORS.
5. NON-HANDED BASIC DEVICE DESIGN WITH CENTER CASE INTERCHANGEABLE WITH ALL FUNCTIONS, NO EXTRA PARTS REQUIRED TO EFFECT CHANGE OF FUNCTION.
6. RELEASABLE WITH 32 LB. MAXIMUM PRESSURE UNDER 250 LB. LOAD TO THE DOOR.
B. SPECIFIC FEATURES:
1. NON-FIRE RATED DEVICES: CYLINDER DOGGING.
2. LEVER TRIM: BREAKAWAY TYPE, FORGED BRASS OR BRONZE ESCUTCHEON MIN .130" THICKNESS, MATCH LOCKSET LEVER DESIGN.
3. ROD AND LATCH GUARDS WITH SURFACE VERTICAL ROD DEVICES.
4. FIRE-LABELED DEVICES: UL LABEL INDICATING "FIRE EXIT HARDWARE". VERTICAL ROD DEVICES LESS BOTTOM ROD (LBR) UNLESS OTHERWISE SCHEDULED.

2.5 CLOSERS

A. GENERAL: ONE MANUFACTURER FOR CLOSER UNITS THROUGHOUT THE WORK, INCLUDING SURFACE CLOSERS, HIGH SECURITY CLOSERS, OVERHEAD CONCEALED CLOSERS, FLOOR CLOSERS, LOW-ENERGY DOOR OPERATORS AND ELECTROMAGNETIC HOLD-OPEN CLOSERS.
B. SURFACE CLOSERS:
1. FULL RACK-AND-PINION TYPE CYLINDER WITH REMOVABLE NON-FERROUS COVER AND CAST IRON BODY. DOUBLE HEAT-TREATED PINION SHAFT, SINGLE PIECE FORGED PISTON, CHROME-SILICON STEEL SPRING.
2. ISO 2000 CERTIFIED. UNITS STAMPED WITH DATE-OF-MANUFACTURE CODE.
3. INDEPENDENT LAB-TESTED 8,000,000 CYCLES.
4. THRU-BOLTS AT WOOD DOORS UNLESS DOORS ARE PROVIDED WITH CLOSER BLOCKING. NON-SIZED, NON-HANDED, AND ADJUSTABLE. PLACE CLOSER INSIDE BUILDING, STAIRS, AND ROOMS.
5. PLATES, BRACKETS AND SPECIAL TEMPLATING WHEN NEEDED FOR INTERFACE WITH PARTICULAR HEADER, DOOR AND WALL CONDITIONS AND NEIGHBORING HARDWARE.
6. OPENING PRESSURE: EXTERIOR DOORS 8.5 LB.,INTERIOR DOORS 5 LB., LABELED FIRE DOORS 15 LBS.
7. SEPARATE ADJUSTING VALVES FOR CLOSING SPEED, LATCHING SPEED AND BACKCHECK, FOURTH VALVE FOR DELAYED ACTION WHERE SCHEDULED.
8. EXTRA-DUTY ARMS (EDA) AT EXTERIOR DOORS SCHEDULED WITH PARALLEL ARM UNITS.
9. EXTERIOR DOOR CLOSERS: TESTED TO 100 HOURS OF ASTM B117-11 SALT SPRAY TEST, FURNISH DATA ON REQUEST.
10. EXTERIOR DOORS DO NOT REQUIRE SEASONAL ADJUSTMENTS IN TEMPERATURES FROM 120 DEGREES F TO -30 DEGREES F, FURNISH DATA ON REQUEST.
11. NON-FLAMING FLUID WILL NOT FUEL DOOR OR FLOOR COVERING FIRES.

2.6 OTHER HARDWARE

A. OVERHEAD STOPS: STAINLESS STEEL. NON-PLASTIC MECHANISMS AND FINISHED METAL END CAPS. FIELD-CHANGEABLE HOLD-OPEN, FRICTION AND STOP-ONLY FUNCTIONS.
B. KICK PLATES: FOUR BEVELED EDGES, .050 INCHES MINIMUM THICKNESS, HEIGHT AND WIDTH AS SCHEDULED. SHEET-METAL SCREWS OF BRONZE OR STAINLESS STEEL TO MATCH OTHER HARDWARE.
C. DOOR STOPS: PROVIDE STOPS TO PROTECT WALLS, CASEWORK OR OTHER HARDWARE.
1. UNLESS OTHERWISE NOTED IN HARDWARE SETS, PROVIDE WALL TYPE WITH APPROPRIATE FASTENERS. WHERE WALL TYPE CANNOT BE USED, PROVIDE FLOOR TYPE. IF NEITHER CAN BE USED, PROVIDE OVERHEAD TYPE.
D. SEALS: FINISHED TO MATCH ADJACENT FRAME COLOR. RESILIENT SEAL MATERIAL: SOLID HIGH-GRADE NEOPRENE. UL LABEL APPLIED TO SEALS ON RATED DOORS. SUBSTITUTE PRODUCTS: CERTIFY THAT THE PRODUCTS EQUAL OR EXCEED SPECIFIED MATERIAL'S THICKNESS AND DURABILITY. PROPOSED SUBSTITUTIONS: SUBMIT FOR APPROVAL.
1. SOLID NEOPRENE: MIL SPEC. R6855-CL III, RADE 40.
2. NON-CORRODING FASTENERS AT IN-SWINGING EXTERIOR DOORS.
3. FIRE-RATED DOORS, RESILIENT SEALS:UL10C COMPLIANT. COORDINATE WITH SELECTED DOOR MANUFACTURERS AND SELECTED FRAME MANUFACTURER'S REQUIREMENTS. WHERE RIGID HOUSED RESILIENT SEALS ARE SCHEDULED IN THIS SECTION AND THE SELECTED DOOR MANUFACTURER ONLY REQUIRES AN ADHESIVE MOUNTED RESILIENT SEAL, FURNISH RIGID HOUSED SEAL AT MINIMUM, OR BOTH THE RIGID HOUSED SEAL AND THE ADHESIVE APPLIED SEAL IF NECESSARY TO FULFILL DOOR MANUFACTURER'S REQUIREMENT. ADHESIVE APPLIED SEAL ALONE IS DEEMED INSUFFICIENT FOR THIS PROJECT WHERE RIGID HOUSED SEALS ARE SCHEDULED.
4. FIRE-RATED DOORS, INTUMESCENT SEALS: FURNISH FIRE-LABELED OPENING ASSEMBLY COMPLETE AND IN FULL COMPLIANCE WITH UL10C. FURNISHED BY SELECTED DOOR MANUFACTURER, THESE SEALS VARY IN REQUIREMENT BY DOOR TYPE AND DOOR MANUFACTURE.ADHESIVE APPLIED INTUMESCENT STRIPS ARE NOT ACCEPTABLE, USE CONCEALED-IN-DOOR-EDGE TYPE OR KERFED-IN-FRAME TYPE. CAREFUL COORDINATION REQUIRED.
E. THRESHOLDS: AS SCHEDULED AND PER DETAILS. SUBSTITUTE PRODUCTS: CERTIFY THAT THE PRODUCTS EQUAL OR EXCEED SPECIFIED MATERIAL'S THICKNESS. PROPOSED SUBSTITUTIONS: SUBMIT FOR APPROVAL.
1. EXTERIORS: SET IN FULL BED OF BUTYL-RUBBER OR POLYISOBUTYLENE MASTIC SEALANT COMPLYING WITH REQUIREMENTS IN DIVISION 7 "THERMAL AND MOISTURE PROTECTION". NON-FERROUS 1/4 INCH FASTENERS AND LEAD EXPANSION SHIELD ANCHORS, OR RED-HEAD #SFS-1420 (OR APPROVED EQUIVALENT) FLAT HEAD SLEEVE ANCHORS (SS/FHSL).
F. FASTENERS: GENERALLY, EXPOSED SCREWS TO BE PHILLIPS OR ROBERTSON DRIVE. PINNED TORX DRIVE AT HIGH SECURITY AREAS. FLAT HEAD SLEEVE ANCHORS (FHSL) MAY BE SLOTTED DRIVE. SHEET METAL AND WOOD SCREWS: FULL-THREAD. SLEEVE NUTS: FULL LENGTH TO PREVENT DOOR COMPRESSION.
H. SILENCERS: INTERIOR HOLLOW METAL FRAMES, 3 FOR SINGLE DOORS, 4 FOR PAIRS OF DOORS.OMIT WHERE ADHESIVE MOUNTED SEAL OCCURS. LEAVE NO UNFILLED/UNCOVERED PRE-PUNCHED SILENCER HOLES.
I. KEY CONTROL SOFTWARE: SAME MANUFACTURER AS KEY CYLINDERS, SUPPLY TO OWNER.

2.7 FINISH:

A. GENERALLY BHMA 626 SATIN CHROMIUM.
1. AREAS USING BHMA 626 TO HAVE PUSH-PLATES, PULLS AND PROTECTION PLATES OF BHMA 630, SATIN STAINLESS STEEL, UNLESS OTHERWISE NOTED.
B. DOOR CLOSERS: FACTORY POWDER COATED TO MATCH OTHER HARDWARE, UNLESS OTHERWISE NOTED.
1. PROVIDE SATIN-CHROME PLATED ARMS, TRACKS AND COVERS WHERE SCHEDULED BRIGHT METALLIC POWDER COAT (789 - MTLPC) NOT AVAILABLE.
C. ALUMINUM ITEMS: MATCH PREDOMINANT ADJACENT MATERIAL. SEALS TO COORDINATE WITH FRAME COLOR.

2.8 KEYING REQUIREMENTS:

A. KEY SYSTEM: SCHLAGE PRIMUS PATENTED/RESTRICTED KEYWAY, NON-INTERCHANGEABLE CORE. KEY BLANKS AVAILABLE ONLY FROM FACTORY-DIRECT SOURCES, NOT AVAILABLE FROM AFTER-MARKET KEY BLANK MANUFACTURERS. FOR ESTIMATE USE FACTORY GMK CHARGE. INITIATE AND CONDUCT MEETING(S) WITH OWNER TO DETERMINE SYSTEM KEYWAY(S) AND STRUCTURE, FURNISH OWNER'S WRITTEN APPROVAL OF THE SYSTEM.
1. NEW FACTORY REGISTERED /RESTRICTED MASTER KEY SYSTEM.
2. PRIMUS LEVEL 2.
3. CONSTRUCTION KEYING: FURNISH TEMPORARY KEYED-ALIKE CYLINDERS/CORES. REMOVE AT SUBSTANTIAL COMPLETION AND INSTALL PERMANENT CYLINDERS/CORES IN OWNER'S PRESENCE.DEMONSTRATE THAT CONSTRUCTION KEY NO LONGER OPERATES.
4. TEMPORARY CYLINDERS/CORES REMAIN SUPPLIER'S PROPERTY.
5. FURNISH 10 CONSTRUCTION KEYS.
6. FURNISH 2 CONSTRUCTION CONTROL KEYS.
7. RE-COMBINATE ENTIRE PROJECT AT NO EXTRA EXPENSE TO OWNER IF MISSING CONSTRUCTION KEYS.
B. KEY CYLINDERS: UTILITY PATENTED, 6-PIN SOLID BRASS CONSTRUCTION.
C. CYLINDERS/CORES: KEYED AT FACTORY OF LOCK MANUFACTURER WHERE PERMANENT RECORDS ARE MAINTAINED. LOCKS AND CYLINDERS SAME MANUFACTURER.
D. PERMANENT KEYS: SECURED SHIPMENT DIRECT FROM POINT OF ORIGINATION TO OWNER.
1. FOR ESTIMATE: 3 KEYS PER CHANGE COMBINATION, 5 MASTER KEYS PER GROUP, 5 GRAND-MASTER KEYS, 3 CONTROL KEYS.
E. BITTING LIST: SECURED SHIPMENT DIRECT FROM POINT OF ORIGINATION TO OWNERS COMPLETION.

PART 3 - EXECUTION

3.1 ACCEPTABLE INSTALLERS

A. FACTORY TRAINED, CERTIFIED, AND CARRIES A FACTORY-ISSUED CARD CERTIFYING THAT PERSON AS A "CERTIFIED INSTALLER". ALTERNATIVE: CAN DEMONSTRATE SUITABLY EQUIVALENT COMPETENCE AND EXPERIENCE.

3.2PREPARATION

A. ENSURE THAT WALLS AND FRAMES ARE SQUARE AND PLUMB BEFORE HARDWARE INSTALLATION.
B. LOCATE HARDWARE PER SDI-100 AND APPLICABLE BUILDING, FIRE, LIFE-SAFETY, ACCESSIBILITY, AND SECURITY CODES.
1. NOTIFY ARCHITECT OF ANY CODE CONFLICTS BEFORE ORDERING MATERIAL.
2. WHERE NEW HARDWARE IS TO BE INSTALLED NEAR EXISTING DOORS/HARDWARE SCHEDULED TO REMAIN, MATCH LOCATIONS OF EXISTING HARDWARE.

3.3 INSTALLATION

A. INSTALL HARDWARE PER MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. DO NOT INSTALL SURFACE-MOUNTED ITEMS UNTIL FINISHES HAVE BEEN COMPLETED ON SUBSTRATE. SET UNITS LEVEL, PLUMB AND TRUE TO LINE AND LOCATION. ADJUST AND REINFORCE ATTACHMENT SUBSTRATE FOR PROPER INSTALLATION AND OPERATION.
1. GASKETS: INSTALL JAMB-APPLIED GASKETS BEFORE CLOSERS, OVERHEAD STOPS, RIM STRIKES, ETC. INSTALL SWEEPS ACROSS BOTTOMS OF DOORS BEFORE ASTRAGALS, COPE SWEEPS AROUND BOTTOM PIVOTS, TRIM ASTRAGALS TO TOPS OF SWEEPS.
2. WHEN HARDWARE IS TO BE ATTACHED TO EXISTING METAL SURFACE AND INSUFFICIENT REINFORCEMENT EXISTS, USE RIVNUTS, NUTSERTS OR SIMILAR ANCHORING DEVICE FOR SCREWS.
B. LOCATE FLOOR STOPS NOT MORE THAN 4 INCHES FROM THE WALL.
C. DRILL PILOT HOLES FOR FASTENERS IN WOOD DOORS AND/OR FRAMES.

3.4 ADJUSTING

A. ADJUST AND CHECK FOR PROPER OPERATION AND FUNCTION. REPLACE UNITS, WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY.
1. HARDWARE DAMAGED BY IMPROPER INSTALLATION OR ADJUSTMENT METHODS TO BE REPAIRED OR REPLACED TO OWNER'S SATISFACTION.
B. INSPECTION: USE HARDWARE SUPPLIER. INCLUDE SUPPLIERS WITH CLOSEOUT DOCUMENTS.
C. FOLLOW-UP INSPECTION: INSTALLER TO PROVIDE LETTER OF AGREEMENT TO OWNER THAT APPROXIMATELY 6 MONTHS AFTER SUBSTANTIAL COMPLETION, INSTALLER WILL VISIT PROJECT WITH REPRESENTATIVES OF THE MANUFACTURERS OF THE LOCKING DEVICES AND DOOR CLOSERS TO ACCOMPLISH FOLLOWING:
1. RE-ADJUST HARDWARE.
2. EVALUATE MAINTENANCE PROCEDURES AND RECOMMEND CHANGES OR ADDITIONS, AND INSTRUCT OWNER'S PERSONNEL.
3. IDENTIFY ITEMS THAT HAVE DETERIORATED OR FAILED.
4. SUBMIT WRITTEN REPORT IDENTIFYING PROBLEMS AND LIKELY FUTURE PROBLEMS.

3.5 PROTECTION/CLEANING:

A. COVER INSTALLED HARDWARE, PROTECT FROM PAINT, CLEANING AGENTS, WEATHERING, CARTS/BARROWS, ETC. REMOVE COVERING MATERIALS AND CLEAN HARDWARE JUST PRIOR TO SUBSTANTIAL COMPLETION.
B. CLEAN ADJACENT WALL, FRAME AND DOOR SURFACES SOILED FROM INSTALLATION/REINSTALLATION PROCESS.

3.6 SCHEDULE OF FINISH HARDWARE

A. SEE DOOR SCHEDULE IN DRAWINGS FOR HARDWARE SET ASSIGNMENTS.

END OF SECTION

SECTION 08630 VINYL WINDOWS

PART 1- GENERAL

1.1 SUMMARY

A. THIS SECTION INCLUDES VINYL WINDOW UNITS AS SHOWN ON THE DRAWINGS

1.2 PERFORMANCE STANDARDS

A. AAMA/NWWDA 101/I.S.2 – 97
B. ASTM E 283 (AIR LEAKAGE)
C. ASTM E 330 (STRUCTURAL PERFORMANCE)
D. ASTM E 547 (WATER RESISTANCE)

1.3 FIELD VERIFICATION
A. THE WINDOW SUPPLIER SHALL BE RESPONSIBLE FOR REVIEWING AND FIELD VERIFYING ALL MEASUREMENTS AND CONDITIONS FOR ALL WINDOW OPENINGS IN THIS PROJECT. WINDOW SUPPLIER WILL INFORM ARCHITECT OF ISSUES OF CONDITIONS OF AREAS TO RECEIVE THE WINDOWS.

1.4 SUBMITTALS

A. PRODUCT DATA: SUBMIT MANUFACTURER'S PRODUCT SPECIFICATIONS, TECHNICAL SUPPORT DATA, INSTALLATION AND MAINTENANCE RECOMMENDATIONS AND STANDARD DETAILS FOR EACH TYPE OF UNIT REQUIRED, INCLUDING FINISHING METHODS, HARDWARE AND ACCESSORIES.
B. PRODUCT DRAWINGS: FOR EACH TYPE OF WINDOW SPECIFIED, SUBMIT STANDARD ASSEMBLY AND DETAILS FOR LAP SIDING, BRICK VENEER, CAST OR REAL STONE, AND STUCCO
C. COLOR SAMPLES: SUBMIT SAMPLES OF EACH REQUIRED EXTERIOR FINISH ON PVC SAMPLE. SUBMIT SAMPLE OF CO EXTRUDED PVC MATERIAL WITH REQUIRED INTERIOR AND EXTERIOR FINISH.

1.5 DELIVERY, STORAGE, AND HANDLING
A. COMPLY WITH MANUFACTURER'S INSTRUCTIONS FOR PROTECTION OF UNITS FROM DAMAGE.

1.6 WARRANTY
A. THE MANUFACTURER SHALL PROVIDE THE OWNER WITH A "LIFETIME LIMITED WARRANTY" STATING THAT ALL WINDOWS WILL BE FREE FROM MANUFACTURING DEFECTS FOR LIFE; TO INCLUDE SCREENS AND GLASS

PART 2 – PRODUCTS

2.1 APPROVED MANUFACTURERS:

A. AMSCO WINDOWS, SALT LAKE CITY, UT
B. SUBSTITUTIONS WILL BE CONSIDERED DURING BIDDING

2.2 GENERAL

A. SLIDING OPERABLE SASHES SHALL HAVE AN EASILY GRIPABLE PROJECTING FIN OR HANDLE DEVICE TO ASSIST IN EASY OPENING AND CLOSING OF THE WINDOW.
B. PROVIDE INTERNAL OFFSET WEEP HOLES AND CHANNELS TO MIGRATE MOISTURE TO EXTERIOR.
C. PROVIDE INTEGRAL NAIL FIN TO PERIMETER OF UNIT.

2.3 MATERIALS
A. VINYL
1. COMPLY WITH REQUIREMENT OF AAMA/NWWDA 101/I.S.2-97, ASTM D4216-13 SPECIFICATION FOR RIGID (POLY VINYL CHLORIDE) PVC AND RELATED PLASTIC BUILDING PRODUCT COMPOUNDS.
2. PVC COMPOUND CONTAINING IMPACT-RESISTANT- SOLID PLASTICIZER TITANIUM DIOXIDE, SURFACE AND COLOR STABILIZERS.
3. ALL SOLID COLOR APPLICATIONS ARE TO BE HOMOGENEOUS.
4. ALL CORNERS SHALL BE FUSION-WELDED FROM A FOUR AND EIGHT POINT WELDING SYSTEM FOR INCREASED STRENGTH AND ACCURACY IN FRAME DIMENSIONS.
B. GLASS: PROVIDE THE MANUFACTURER'S STANDARD ¾" OR 1" THICK CLEAR OR LOW E OR LOW E TINTED INSULATED GLAZING MATERIAL THAT COMPLIES WITH ASTM E 774 CLASS A.
C. FACTORY EXTERIOR GLAZED EXCEPT WHERE FIELD GLAZING IS REQUIRED DUE TO LARGE WINDOW UNIT DIMENSIONS. UNITS SHALL BE REGLAZEABLE WITHOUT DISMANTLING SASH FRAMING.
D. SPACER BAR: PPG INTERCEPT WARM EDGE STEEL SPACER OR ALUMINUM SPACER
E. PROVIDE PVC SNAP-ON GLAZING STOPS (BEADS) TO MATCH EXTERIOR WINDOW FINISH.

2.4 HARDWARE

A. PROVIDE THE MANUFACTURER'S STANDARD STYLELOCK SYSTEM HARDWARE FORMED FROM AN ENGINEERED PLASTIC MATERIAL AND OF SUFFICIENT STRENGTH TO PERFORM ITS INTENDED FUNCTION. HARDWARE COLOR SHALL MATCH THE VINYL COLOR. ALL LOCKING HARDWARE MUST HAVE CERTIFIED FORCED ENTRY RESISTANCE PERFORMANCE PER: WINDOWS- ASTM F588-14, AAMA 1302.5, OR AAMA 2300. DOORS TESTED TO ASTM F842-14, AAMA 1303.5 OR AAMA 2301.

2.5 WEATHER PROTECTION

A. OPERATING SASH MEMBER SHALL BE WEATHER-STRIPPED WITH EITHER FIN SEAL, OR Q-LON WEATHER-STRIPPING.
B. COMPRESSION WEATHER-STRIPPING: PROVIDE THE MANUFACTURER'S STANDARD NON-FERROUS SPRING METAL OR VINYL GASKET COMPRESSION WEATHER-STRIPPING, CONCEALED WHEN SASH IS CLOSED, AND AS REQUIRED TO MEET PERFORMANCE STANDARDS UNDER BUMPER OR WIPER ACTION.
C. SLIDING WEATHER-STRIPPING: PROVIDE WOVEN PILE WEATHER-STRIPPING OF POLYPROPYLENE, WOOL, OR NYLON PILE, WITH RESIN-IMPREGNATED BACKING FABRIC COMPLYING WITH AAMA 701.2

2.6 ACCESSORIES AND OPTIONS
A. INSECT SCREENS: PROVIDE INSECT SCREENS FOR EACH OPERABLE EXTERIOR SASH OR VENTILATOR. LOCATE SCREENS ON INSIDE OR OUTSIDE OF WINDOW SASH OR VENTILATOR, DEPENDING ON WINDOW TYPE. DESIGN WINDOWS AND HARDWARE TO ACCOMMODATE SCREENS IN A TIGHT-FITTING REMOVABLE ARRANGEMENT WITH A MINIMUM OF EXPOSED FASTENERS AND LATCHES. SCREEN FABRIC SHALL BE 18 X 16 OR 18 X 14 MESH OF PLASTIC-COATED GLASS FIBER THREADS, WOVEN AND FUSED TO FORM FABRIC MESH WHICH IS RESISTANT TO CORROSION, SHRINKAGE, STRETCH, IMPACT DAMAGE, AND WEATHER DETERIORATION; BLACK OR DARK GRAY (COORDINATE COLOR SELECTION WITH OWNER). COMPLY WITH FS L-S-125.
B. MUNTINS: PROVIDE OPTIONAL MUNTINS FROM A CHOICE OF TWO DIFFERENT PROFILES (5/8" FLAT OR SCULPTURED GRIDS), SEALED BETWEEN TWO PANES OF GLASS IN PATTERNS AS SHOWN ON THE DRAWINGS. 5/8" FLAT OR SCULPTURED GRIDS IN MATCHING COLORS TO THE VINYL.
C. SEALANT: UNLESS OTHERWISE INDICATED FOR SEALANTS REQUIRED WITHIN FABRICATED WINDOW UNITS, PROVIDE TYPE RECOMMENDED BY WINDOW MANUFACTURER FOR THE JOINT SIZE AND MOVEMENT, ADHESION TO ADJACENT MATERIALS, TO REMAIN PERMANENTLY ELASTIC, NON-SHRINKING AND NON-MIGRATING. ENSURE TWO SIDED ADHESION ONLY.
D. ACCESSORIES: ACCESSORY MATERIALS REQUIRED TO FILL LARGE GAPS AROUND NEW WINDOW FRAMING AND EXISTING OPENINGS SHALL BE OF SIMILAR MATERIAL, FINISH, AND COLOR AS THE WINDOW FRAME MATERIAL. SUCH MATERIALS SHALL BE SUPPLIED BY THE WINDOW MANUFACTURER AND CUSTOM FIT FOR THE APPLICATION.

2.7 FASTENERS

A. STAINLESS STEEL OR OTHER METALLIC OR NON-METALLIC MATERIAL RECOMMENDED BY THE MANUFACTURER AS NON-CORROSIVE AND COMPATIBLE WITH WINDOW MEMBER, TRIM, ANCHORS AND OTHER COMPONENTS OF THE WINDOW UNITS. ENSURE EXPNSION AND CONTRACTION OF ADJACENT MATERIALS WILL NOT AFFECT THE STABILITY OR WATERTIGHTNESS OF THE WINDOW OR ITS INSTALLATION.
B. ANCHORS, CLIPS, AND WINDOW ACCESSORIES: DEPENDING ON STRENGTH AND CORROSION-INHIBITING REQUIREMENTS, FABRICATE UNITS OF BENT VINYL EXTRUSIONS, OR VERIFY THAT THE WINDOW MANUFACTURER WILL WARRANT THE WINDOW PRODUCT AND INSTALLATION WITH THE USE OF THE FOLLOWING MATERIALS: STAINLESS STEEL, OR HOT-DIP ZINC-COATED STEEL OR IRON COMPLYING WITH ASTM A123/A123M-15.

PART 3 – EXECUTION

3.1 EXAMINATION

A. VERIFY WALL OPENING AND ADJOINING AIR AND VAPOR SEAL MATERIALS ARE READY TO RECEIVE WORK OF THIS SECTION.

3.2 INSTALLATION

A. COMPLY WITH "INSTALLATION MASTERS" STANDARD, MANUFACTURER' SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF WINDOW UNITS, HARDWARE, OPERATORS, ACCESSORIES AND OTHER WINDOW COMPONENTS.
B. OPENING PANELS MUST BE CLOSED AND LOCKED DURING INSTALLATION. WINDOWS MUST BE INSTALLED LEVEL, PLUMB AND SQUARE WITH ¼" CLEARANCE ON ALL SIDES AND WITH WEEP HOLES AT BOTTOM. ANCHOR SECURELY IN PLACE. SHIM AS REQUIRED.
C. HEADERS MUST NOT BE NAILED. NAIL THROUGH FIN INTO FRAMING ALONG SIDES AND BASE WHILE STAYING 4" FROM CORNERS. AT THE HEAD, FINISHING NAILS MAY BE PLACED ½' ABOVE FIN AND BENT DOWN OVER FIN TO ALLOW FOR HEADER DEFLECTION. FULL SUPPORT IS REQUIRED ALONG ENTIRE LENGTH OF SILL.
D. OPERATING SASH AND HARDWARE SHOULD FIT TIGHT AT CONTACT POINTS AND WEATHER-STRIPPING.
E. USE BITUMINOUS PAPER OR GASKET MATERIAL ON SILL FOR PATIO DOORS INSTALLED ON CONCRETE.
F. SET SILL MEMBERS AND OTHER MEMBERS IN A BED OF COMPOUND OR WITH JOINT FILLERS OR GASKETS TO PROVIDE WEATHER TIGHT CONSTRUCTION. FILLERS AND GASKETS TO BE INSTALLED CONCURRENTLY WITH WINDOW UNITS.

3.3 CLEANING

A. REMOVE PROTECTIVE MATERIAL FROM PRE-FINISHED SURFACES.
B. WASH DOWN SURFACES WITH SOLUTION OF MILD DETERGENT IN WARM WATER, APPLIED WITH SOFT, CLEAN WIPING CLOTHS. TAKE CARE TO REMOVE DIRT FROM CORNERS. WIPE SURFACES CLEAN.
C. DO NOT USE PETROLEUM DISTILLANTS TO CLEAN WINDOWS.
D. CLEAN VINYL SURFACES PROMPTLY AFTER INSTALLATION OF WINDOWS, EXERCISING CARE TO AVOID DAMAGE OF THE FINISHES. REMOVE EXCESS GLAZING AND SEALANT COMPOUNDS, DIRT AND OTHER SUBSTANCES.

END OF SECTION

<u>SECTION 08 80 00 – GLAZING</u>

PART 1. GENERAL

1.01 SECTION INCLUDES

A. GLASS AND GLAZING FOR SECTIONS REFERENCING THIS SECTION FOR PRODUCTS AND INSTALLATION.

1.02 SYSTEM DESCRIPTION

A. GLASS AND GLAZING MATERIALS OF THIS SECTION SHALL PROVIDE CONTINUITY OF BUILDING ENCLOSURE, BOTH VAPOR AND AIR BARRIER.
B. SIZE GLASS TO WITHSTAND DEAD LOADS AND POSITIVE AND NEGATIVE LIVE LOADS ACTING NORMAL TO PLANE OF GLASS.

1.03 QUALITY ASSURANCE

A. PERFORM WORK IN ACCORDANCE WITH FGMA GLAZING MANUAL, FGMA SEALANT MANUAL FOR GLAZING INSTALLATION METHODS.

1.04 WARRANTY

A. PROVIDE FIVE YEAR WARRANTY INCLUDING COVERAGE FOR SEALED GLASS UNITS FROM SEAL FAILURE, INTERPANE DUSTING OR MISTING, AND REPLACEMENT OF SAME.

PART 2 PRODUCTS

2.01 FLAT GLASS MATERIALS

A. FLOAT GLASS : CLEAR, 1/4 INCH THICK MINIMUM.
B. SAFETY GLASS: CLEAR & FULLY TEMPERED & CONFORMING TO ANSI Z97.1 & 1/4 INCH THICK MINIMUM.
C. 1" INSULATED GLASS

PART 3 EXECUTION

3.01EXAMINATION AND PREPARATION

A. VERIFY THAT OPENINGS FOR GLAZING ARE CORRECTLY SIZED, WITHIN TOLERANCE, AND GLAZING CHANNELS OR RECESSES ARE CLEAN, FREE OF OBSTRUCTIONS, AND READY TO RECEIVE GLAZING.
B.SEAL POROUS GLAZING CHANNELS OR RECESSES WITH SUBSTRATE COMPATIBLE PRIMER OR SEALER.

3.02 CLEANING

A. REMOVE GLAZING MATERIALS FROM FINISH SURFACES.
B. REMOVE LABELS AFTER WORK IS COMPLETE.
C. CLEAN GLASS.

<u>DIVISION 9 – FINISHES</u>

SECTION 09260 – GYPSUM WALLBOARD SYSTEM

PART 1.GENERAL

1.01SECTION INCLUDES

A. GYPSUM BOARD WITH TAPED AND SANDED JOINT TREATMENT.

PART 2PRODUCTS

2.01 GYPSUM BOARD SYSTEM

G. GYPSUM BOARD TYPES: 5/8 INCH THICK, MAXIMUM PERMISSIBLE LENGTH & ENDS SQUARE CUT, TAPERED EDGES & UNLESS NOTED OTHERWISE AS FOLLOWS:
1.STANDARD TYPE: ASTM C36.
2.FIRE RATED TYPE: ASTM C36 FIRE RESISTIVE, UL RATED.
3.MOISTURE RESISTANT TYPE: ASTM C630 / C630M - 03.
4.CEMENTITIOUS BACKING BOARD: HIGH DENSITY, CEMENTITIOUS, GLASS FIBER REINFORCED, 1/2 INCH THICK.

2.02 ACCESSORIES

A. CORNER BEADS: METAL.
B. EDGE TRIM: GA 201 AND GA 216, TYPE L BEAD AND U SHAPE EXPOSED REVEAL BEAD.
C. JOINT MATERIALS: ASTM C475 GA 201 AND GA 216, REINFORCING TAPE, JOINT COMPOUND, ADHESIVE, AND WATER.
D. FASTENERS: ASTM C1002 TYPE W NAILS OR ASTM C1002 TYPE S12 HARDENED SCREWS GA 216.
E. ADHESIVE: ASTM C557 GA 216.

3.01I NSTALLATION - GYPSUM BOARD

A. INSTALL GYPSUM BOARD IN ACCORDANCE WITH GA-201, GA-216 AND GA-600.
B. FASTEN GYPSUM BOARD TO FURRING OR FRAMING WITH NAILS OR SCREWS.
C. PLACE CORNER BEADS AT EXTERNAL CORNERS. USE LONGEST PRACTICAL LENGTH. PLACE EDGE TRIM WHERE GYPSUM BOARD ABUTS DISSIMILAR MATERIALS.
D. TREAT CUT EDGES AND HOLES IN MOISTURE RESISTANT GYPSUM BOARD WITH SEALANT.

3.05 JOINT TREATMENT

A. TAPE, FILL AND SAND EXPOSED JOINTS, EDGES AND CORNERS TO PRODUCE SMOOTH SURFACE, READY TO RECEIVE FINISHES.
B. FEATHER COATS ONTO ADJOINING SURFACES.
C. TAPING, FILLING, AND SANDING IS NOT REQUIRED AT SURFACES BEHIND ADHESIVE APPLIED CERAMIC TILE, OR F.R.P.

3.06 TOLERANCES

A. MAXIMUM VARIATION FROM TRUE FLATNESS: 1/8 INCH IN 10 FEET IN ANY DIRECTION.

END OF SECTION

<u>SECTION 09 90 00 – PAINTING</u>

PART 1.GENERAL

1.01 SECTION INCLUDES

A. SURFACE PREPARATION AND FIELD APPLICATION OF PAINTS AND COATINGS.

1.02 ENVIRONMENTAL REQUIREMENTS

A. STORE AND APPLY MATERIALS IN ENVIRONMENTAL CONDITIONS REQUIRED BY MANUFACTURER'S INSTRUCTIONS.

PART 2PRODUCTS

2.01MATERIALS

A. COATINGS: READY MIXED (EXCEPT FIELD CATALYZED) COATINGS OF GOOD FLOW AND BRUSHING PROPERTIES, CAPABLE OF DRYING OR CURING FREE OF STREAKS OR SAGS.
B. ACCESSORY MATERIALS: LINSEED OIL, SHELLAC, TURPENTINE, PAINT THINNERS AND OTHER MATERIALS REQUIRED TO ACHIEVE THE FINISHES SPECIFIED.

2.02 FINISHES

A. REFER TO SCHEDULE AT END OF SECTION FOR SURFACE FINISH AND COLOR SCHEDULE.

PART 3EXECUTION

3.01 EXAMINATION AND PREPARATION

A. VERIFY THAT SUBSTRATE CONDITIONS ARE READY TO RECEIVE WORK.
B. MEASURE MOISTURE CONTENT OF POROUS SURFACES USING AN ELECTRONIC MOISTURE METER. DO NOT APPLY FINISHES UNLESS MOISTURE CONTENT IS LESS THAN 12 PERCENT.
C. CORRECT MINOR DEFECTS AND CLEAN SURFACES WHICH AFFECT WORK OF THIS SECTION.
D. REMOVE OR MASK ELECTRICAL PLATES, HARDWARE, LIGHT FIXTURE TRIM, ESCUTCHEONS, AND FITTINGS PRIOR TO PREPARING SURFACES OR FINISHING.
E. GYPSUM BOARD SURFACES: FILL MINOR DEFECTS WITH LATEX COMPOUNDS. SPOT PRIME DEFECTS AFTER REPAIR.
F. GALVANIZED SURFACES: REMOVE SURFACE CONTAMINATION AND OILS AND WASH WITH SOLVENT. APPLY COAT OF ETCHING PRIMER.
F. CONCRETE AND UNIT MASONRY SURFACES SCHEDULED TO RECEIVE PAINT FINISH: REMOVE FOREIGN MATTER. REMOVE OIL AND GREASE WITH A SOLUTION OF TRI-SODIUM PHOSPHATE, RINSE WELL AND ALLOW TO DRY.
G. UNCOATED FERROUS SURFACES: REMOVE SCALE BY WIRE BRUSHING, SANDBLASTING, CLEAN BY WASHING WITH SOLVENT. APPLY TREATMENT OF PHOSPHORIC ACID SOLUTION. PRIME PAINT AFTER REPAIRS.

I. SHOP PRIMED STEEL SURFACES: SAND AND SCRAPE TO REMOVE LOOSE PRIMER AND RUST, CLEAN SURFACES WITH SOLVENT. PRIME BARE STEEL SURFACES.
J. INTERIOR WOOD ITEMS SCHEDULED TO RECEIVE PAINT FINISH: WIPE OFF DUST AND GRIT PRIOR TO PRIMING. SEAL KNOTS, PITCH STREAKS AND SAPPY SECTIONS WITH SEALER. FILL NAIL HOLES AND CRACKS AFTER PRIMER HAS DRIED; SAND BETWEEN COATS.

3.02APPLICATION

A. APPLY PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

3.03CLEANING

A. AS WORK PROCEEDS, PROMPTLY REMOVE FINISHES WHERE SPILLED, SPLASHED OR SPATTERED.

3.04SCHEDULE - EXTERIOR SURFACES (PROVIDE ONE CAN OF EACH COLOR FOR TOUCH UP.)

A. PAVEMENT MARKINGS:
1. TWO COATS OF PAINT, WHITE.
B. CONCRETE, CONCRETE BLOCK, CEMENT PLASTER:
1.ONE COAT OF PRIMER SEALER LATEX.
2.TWO COATS OF LATEX, FLAT.
C. STEEL - SHOP PRIMED:
1.TOUCH-UP WITH ALKYD PRIMER.
2.TOUCH-UP WITH ALKYD PRIMER.
D. STEEL - GALVANIZED:
1.ONE COAT OF GALVANIZED PRIMER.
2.TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS.

3.05 SCHEDULE - INTERIOR SURFACES (PROVIDE ONE CAN OF EACH COLOR FOR TOUCH UP.)

A. WOOD - PAINTED:
1.ONE COAT OF ALKYD PRIMER SEALER.
2.TWO COATS OF ALKYD ENAMEL, SEMIGLOSS.
B. STEEL - GALVANIZED:
1.ONE COAT OF GALVANIZE PRIMER.
2.TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS.
C. PLASTER, GYPSUM BOARD:
1.ONE COAT OF ALKYD PRIMER SEALER.
2.TWO COATS OF ALKYD ENAMEL, SEMIGLOSS.

<u>DIVISION 10 – SPECIALTIES</u>

<u>SECTION 10 28 00– TOILET, BATH, AND LAUNDRY ACCESSORIES</u>

PART 1.GENERAL

SEE DRAWINGS FOR ACCESSORIES SCHEDULE.

<u>SECTION 10522 – FIRE EXTINGUISHERS AND CABINETS</u>

PART 1.GENERAL

DIVISION 1 REQUIREMENTS APPLY TO THIS SECTION.

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LICENSED ARCHITECT
JEFFREY NIELSEN BYERS
No. 7272045
STATE OF UTAH

Sept. 23, 2016

CONSULTANT:

T.C. ENTERPRISE

OWNER:

PARDOE ASSISTED LIVING - MIDVALE

6968 SOUTH 700 WEST
MIDVALE, UTAH 84095

PROJECT:

DATE	DESCRIPTION
6/29/2016	CITY SUBMITTAL
9/9/2016	CITY COMMENTS

1

SPECIFICATIONS

PROJECT #: 14-288.01
DRAWN BY: Author
CHECKED BY: Checker

SHEET #
G015

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1.01 SUMMARY

A. SECTION INCLUDES: FIRE EXTINGUISHERS, CABINETS AND ACCESSORIES.

1.03 QUALITY ASSURANCE

A. SINGLE SOURCE RESPONSIBILITY: OBTAIN PRODUCTS IN THIS SECTION FROM ONE MANUFACTURER.

B. UL-LISTED PRODUCTS: PROVIDE NEW PORTABLE FIRE EXTINGUISHERS WHICH ARE UL-LISTED AND BEAR UL "LISTING MARK" FOR TYPE, RATING, AND CLASSIFICATION OF EXTINGUISHER INDICATED.

2.00 PRODUCTS

2.01 FIRE EXTINGUISHER CABINETS

A. REFER TO DRAWINGS FOR TYPE.

2.02 FIRE EXTINGUISHERS

A. GENERAL: PROVIDE FIRE EXTINGUISHERS FOR EACH LOCATION INDICATED, WHICH COMPLY WITH REQUIREMENTS OF GOVERNING AUTHORITIES.
1.FILL AND SERVICE EXTINGUISHERS TO COMPLY WITH REQUIREMENTS OF GOVERNING AUTHORITIES AND MANUFACTURER'S REQUIREMENTS.
B. MULTI-PURPOSE DRY CHEMICAL TYPE: J.L. INDUSTRIES MODEL "COSMIC 5E", UL-RATED 2A-10BC, 5 LB. NOMINAL CAPACITY, IN ENAMELED STEEL CONTAINER, FOR CLASS A, CLASS B AND CLASS C FIRES.
C. WET CHEMICAL TYPE: J.L. INDUSTRIES MODEL "SATURN 15", UL-RATED CLASS K, 6 LITERS NOMINAL CAPACITY, IN STAINLESS STEEL CONTAINER, FOR CLASS K FIRES.

2.03 MOUNTING BRACKETS

A. PROVIDE MANUFACTURER'S STANDARD BRACKETS DESIGNED TO PREVENT ACCIDENTAL DISLODGEMENT OF EXTINGUISHER, OF SIZES REQUIRED FOR TYPE AND CAPACITY OF EXTINGUISHER INDICATED, IN MANUFACTURER'S STANDARD PLATED FINISH.
1.PROVIDE BRACKETS ALL FOR EXTINGUISHERS PROVIDED.

3.00EXECUTION

3.01 INSTALLATION

A. CONTRACTOR SHALL FURNISH AND INSTALL TWO (2) TYPE 2A10BC UNITS AND TWO (2) CLASS K TYPE UNITS AT LOCATIONS AS DIRECTED.
B. INSTALL ITEMS INCLUDED IN THIS SECTION IN LOCATIONS AND AT MOUNTING HEIGHTS INDICATED, OR IF NOT INDICATED, AT HEIGHTS TO COMPLY WITH APPLICABLE REGULATIONS OF GOVERNING AUTHORITIES.
1.SECURELY FASTEN MOUNTING BRACKETS TO STRUCTURE, SQUARE AND PLUMB, TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS.

<u>SECTION 12 32 13 MANUFACTURED WOOD-VENEER-FACED CASEWORK</u>

PART 1 – GENERAL

1.01 SUMMARY

A. SECTION INCLUDES MANUFACTURED WOOD-VENEER-FACED CABINETS OF STOCK DESIGN.
B. RELATED REQUIREMENTS:
1. SECTION 123619 "WOOD COUNTERTOPS."
2. SECTION 123623.13 "PLASTIC-LAMINATE-CLAD COUNTERTOPS."

1.2 DEFINITIONS

A. DEFINITIONS IN THE AWI'S, AWMAC'S, AND WI'S "ARCHITECTURAL WOODWORK STANDARDS" APPLY TO THE WORK OF THIS SECTION.
B. MDF: MEDIUM-DENSITY FIBERBOARD.
C. HARDWOOD PLYWOOD: A PANEL PRODUCT COMPOSED OF LAYERS OR PLIES OF VENEER, OR OF VENEERS IN COMBINATION WITH LUMBER CORE, HARDBOARD CORE, MDF CORE, OR PARTICLEBOARD CORE, JOINED WITH ADHESIVE AND FACED BOTH FRONT AND BACK WITH HARDWOOD VENEERS.

1.3 ACTION SUBMITTALS

A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
B. SHOP DRAWINGS: INCLUDE PLANS, ELEVATIONS, SECTIONS, DETAILS, AND ATTACHMENTS TO OTHER WORK.
C. SAMPLES: FOR CABINET FINISHES.

1.4 INFORMATIONAL SUBMITTALS

A. QUALITY STANDARD COMPLIANCE CERTIFICATES: AWI QUALITY CERTIFICATION PROGRAM CERTIFICATES.

1.4 WARRANTY

A. SPECIAL WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF CASEWORK THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.
1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
a. DELAMINATION OF COMPONENTS OR OTHER FAILURES OF GLUE BOND.
b. WARPING OF COMPONENTS.
c. FAILURE OF OPERATING HARDWARE.
d. DETERIORATION OF FINISHES.
2. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

A. SOURCE LIMITATIONS: OBTAIN WOOD-VENEER-FACED CASEWORK FROM SINGLE MANUFACTURER. BIDDER TO PROVIDE CASEWORK MANUFACTURER BEING PROPOSED WITH BID DOCUMENT.

2.2 CASEWORK, GENERAL

A. QUALITY STANDARD: UNLESS OTHERWISE INDICATED, COMPLY WITH THE AWI'S, "ARCHITECTURAL WOODWORK STANDARDS" FOR GRADES OF CASEWORK INDICATED FOR CONSTRUCTION, FINISHES, INSTALLATION, AND OTHER REQUIREMENTS.
1. GRADE: CUSTOM.
2. PROVIDE LABELS AND CERTIFICATES FROM AWI CERTIFICATION PROGRAM INDICATING THAT CASEWORK, INCLUDING INSTALLATION, COMPLIES WITH REQUIREMENTS OF GRADES SPECIFIED.
B. PRODUCT DESIGNATIONS: DRAWINGS INDICATE SIZES, CONFIGURATIONS, AND FINISH MATERIALS OF MANUFACTURED WOOD-VENEER-FACED CASEWORK BY REFERENCING DESIGNATED MANUFACTURER'S CATALOG NUMBERS. OTHER MANUFACTURERS' CASEWORK OF SIMILAR SIZES AND DOOR AND DRAWER CONFIGURATIONS, OF SAME FINISH MATERIALS, AND COMPLYING WITH THE SPECIFICATIONS MAY BE CONSIDERED. SEE DIVISION 1 "PRODUCT REQUIREMENTS."
C. PRODUCT DESIGNATIONS: DRAWINGS INDICATE CONFIGURATIONS OF MANUFACTURED WOOD-VENEER-FACED CASEWORK BY REFERENCING DESIGNATIONS OF CASEWORK DESIGN SERIES NUMBERING SYSTEM IN APPENDIX A OF THE AWI'S, "ARCHITECTURAL WOODWORK STANDARDS."
2.3 WOOD-VENEER-FACED CABINETS
A. DESIGN:
1. FLUSH OVERLAY.
B. WOOD SPECIES: TO BE SELECTED BY OWNER. SEE FINISH SCHEDULE ON DRAWINGS.
C. FACE VENEER CUT: PLAIN SLICED.
D. EXPOSED MATERIALS:
1. PLYWOOD: HARDWOOD PLYWOOD WITH FACE VENEER OF SPECIES INDICATED, SELECTED FOR COMPATIBLE COLOR AND GRAIN. PROVIDE BACKS OF SAME SPECIES AS FACES.
2. SOLID WOOD: CLEAR HARDWOOD LUMBER OF SPECIES INDICATED AND SELECTED FOR GRAIN AND COLOR COMPATIBLE WITH EXPOSED PLYWOOD.
E. SEMIEXPOSED MATERIALS:
1. SOLID WOOD: SOUND HARDWOOD LUMBER, SELECTED TO ELIMINATE APPEARANCE DEFECTS, OF ANY SPECIES SIMILAR IN COLOR AND GRAIN TO EXPOSED WOOD.
2. PLYWOOD: HARDWOOD PLYWOOD OF ANY SPECIES SIMILAR IN COLOR AND GRAIN TO EXPOSED WOOD. PROVIDE BACKS OF SAME SPECIES AS FACES.
3. PROVIDE SOLID WOOD OR HARDWOOD PLYWOOD FOR SEMIEXPOSED SURFACES UNLESS OTHERWISE INDICATED.

2.4 MATERIALS

A. HARDWOOD PLYWOOD: HPVA HP-1, PARTICLEBOARD CORE EXCEPT WHERE VENEER CORE IS INDICATED.
B. SOFTWOOD PLYWOOD: DOC PS 1.
C. PARTICLEBOARD: ANSI A208.1, GRADE M-2.
D. MDF: ANSI A208.2, GRADE 130.
E. HARDBOARD: ANSI A135.4, CLASS 1 TEMPERED.
F. EDGEBANDING: MINIMUM 1/8-INCH- (3-MM-) THICK, SOLID WOOD OF SAME SPECIES AS FACE VENEER.
1. SELECT WOOD EDGEBANDING FOR GRAIN AND COLOR COMPATIBLE WITH FACE VENEERS.
2. COLORS:AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
G. THERMOSET DECORATIVE PANELS: PARTICLEBOARD OR MDF FINISHED WITH THERMALLY FUSED, MELAMINE-IMPREGNATED DECORATIVE PAPER AND COMPLYING WITH REQUIREMENTS OF NEMA LD 3, GRADE VGL, FOR TEST METHODS 3.3, 3.4, 3.6, 3.8, AND 3.10.
H. EDGEBANDING FOR THERMOSET DECORATIVE PANELS: PVC OR POLYESTER EDGEBANDING MATCHING THERMOSET DECORATIVE PANELS.
I. GLASS FOR GLAZED DOORS: CLEAR FLOAT GLASS COMPLYING WITH ASTM C 1036, TYPE I, CLASS 1, QUALITY-Q3; NOT LESS THAN 5.0 MM THICK.
J. GLASS FOR GLAZED DOORS: CLEAR TEMPERED GLASS COMPLYING WITH ASTM C 1048, KIND FT, CONDITION A, TYPE I, CLASS 1, QUALITY-Q3; NOT LESS THAN 5.0 MM THICK.

2.5 COLORS AND FINISHES

A. WOOD COLORS AND FINISHES: AS SELECTED BY ARCHITECT FROM CASEWORK MANUFACTURER'S FULL RANGE.

2.6 CASEWORK HARDWARE AND ACCESSORIES

A. HARDWARE, GENERAL: UNLESS OTHERWISE INDICATED, PROVIDE MANUFACTURER'S FULL, CUSTOM LINE, COMMERCIAL-QUALITY, HEAVY-DUTY HARDWARE AS SELECTED BY OWNER.
1. USE THREADED METAL OR PLASTIC INSERTS WITH MACHINE SCREWS FOR FASTENING TO PARTICLEBOARD, EXCEPT WHERE HARDWARE IS THROUGH BOLTED FROM BACK SIDE.
B. FRAMELESS CONCEALED HINGES (EUROPEAN TYPE): BHMA A156.9, TYPE B01602, 170 DEGREES OF OPENING, SELF-CLOSING. PROVIDE TWO HINGES FOR DOORS LESS THAN 48 INCHES (1220 MM) HIGH, AND PROVIDE THREE HINGES FOR DOORS MORE THAN 48 INCHES (1220 MM) HIGH.
C. PULLS: SOLID STAINLESS-STEEL OR CHROME-PLATED BRASS WIRE PULLS, FASTENED FROM BACK WITH TWO SCREWS. FOR SLIDING DOORS, PROVIDE RECESSED STAINLESS-STEEL OR CHROME-PLATED FLUSH PULLS, AS SELECTED BY OWNER. PROVIDE TWO PULLS FOR DRAWERS MORE THAN 24 INCHES (600 MM) WIDE.
D. DOOR CATCHES: POWDER-COATED, OR DUAL, SELF-ALIGNING, PERMANENT MAGNET CATCH. PROVIDE TWO CATCHES ON DOORS MORE THAN 48 INCHES (1220 MM) HIGH.
E. DRAWER SLIDES: BHMA A156.9, TYPE B05091.
F. DRAWER AND HINGED DOOR LOCKS: CYLINDRICAL (CAM) MORTISE TYPE, FIVE-PIN TUMBLER, BRASS WITH CHROME-PLATED FINISH, AND COMPLYING WITH BHMA A156.11, GRADE 1.

PART 3 – EXECUTION

3.1 CASEWORK INSTALLATION
A. GRADE: INSTALL CABINETS TO COMPLY WITH SAME GRADE AS ITEM TO BE INSTALLED.
B. INSTALL CASEWORK LEVEL, PLUMB, AND TRUE; SHIM AS REQUIRED, USING CONCEALED SHIMS. WHERE CASEWORK ABUTS OTHER FINISHED WORK, APPLY FILLER STRIPS AND SCRIBE FOR ACCURATE FIT, WITH FASTENERS CONCEALED WHERE PRACTICAL.
C. BASE CABINETS: SET CABINETS STRAIGHT, LEVEL, AND PLUMB. ADJUST SUBTOPS WITHIN 1/16 INCH (1.5 MM) OF A SINGLE PLANE. ALIGN SIMILAR ADJOINING DOORS AND DRAWERS TO A TOLERANCE OF 1/16 INCH (1.5 MM). BOLT ADJACENT CABINETS TOGETHER WITH JOINTS FLUSH, TIGHT, AND UNIFORM.
D. WALL CABINETS: HANG CABINETS STRAIGHT, LEVEL, AND PLUMB. ADJUST FRONTS AND BOTTOMS WITHIN 1/16 INCH (1.5 MM) OF A SINGLE PLANE. FASTEN CABINETS TO HANGING STRIPS, MASONRY, FRAMING, WOOD BLOCKING, OR REINFORCEMENTS IN WALLS AND PARTITIONS. ALIGN SIMILAR ADJOINING DOORS TO A TOLERANCE OF 1/16 INCH (1.5 MM).
E. FASTEN CABINETS TO ADJACENT CABINETS AND TO MASONRY, FRAMING, WOOD BLOCKING, OR REINFORCEMENTS IN WALLS AND PARTITIONS TO COMPLY WITH THE AWI'S "ARCHITECTURAL WOODWORK STANDARDS."
F. ADJUST CASEWORK AND HARDWARE SO DOORS AND DRAWERS OPERATE SMOOTHLY WITHOUT WARP OR BIND. LUBRICATE OPERATING HARDWARE AS RECOMMENDED BY MANUFACTURER.

3.2 CLEANING

A. CLEAN FINISHED SURFACES, TOUCH UP AS REQUIRED, AND REMOVE OR REFINISH DAMAGED OR SOILED AREAS TO MATCH ORIGINAL FACTORY FINISH, AS APPROVED BY ARCHITECT.

END OF SECTION

<u>SECTION 14 24 23 HYDRAULIC PASSENGER ELEVATORS</u>

PART 1GENERAL

1.1 SECTION INCLUDES

A. HYDRAULIC PASSENGER ELEVATORS.

1.3 REFERENCES

A. ANSI/ASME A17.1 – SAFETY CODE FOR ELEVATORS AND ESCALATORS.
B. ISO 9001-2000 – QUALITY MANAGEMENT SYSTEMS – REQUIREMENTS.

1.4 DESIGN REQUIREMENTS

A. ARRANGE ELEVATOR COMPONENTS IN MACHINE ROOM SO EQUIPMENT CAN BE REMOVED FOR REPAIRS OR REPLACED WITHOUT DISMANTLING OR REMOVING OTHER EQUIPMENT COMPONENTS.

1.5 SUBMITTALS

A. COMPLY WITH SUBMITTAL PROCEDURES.
B. PRODUCT DATA: SUBMIT MANUFACTURER/INSTALLER'S PRODUCT DATA, INCLUDING INSTALLATION INSTRUCTIONS.
C. SHOP DRAWINGS: SUBMIT MANUFACTURER/INSTALLER'S SHOP DRAWINGS, INCLUDING PLANS, ELEVATIONS, SECTIONS, AND DETAILS, INDICATING LOCATION OF EQUIPMENT, LOADS, DIMENSIONS, TOLERANCES, MATERIALS, COMPONENTS, FABRICATION, FASTENERS, HARDWARE, FINISH, OPTIONS, ACCESSORIES, AND OTHER INFORMATION TO RENDER TOTALLY FUNCTIONAL ELEVATORS.
D. SAMPLES: SUBMIT MANUFACTURER/INSTALLER'S SAMPLES OF STANDARD COLORS AND FINISHES OF FINISH MATERIALS.
E. OPERATION AND MAINTENANCE MANUAL: SUBMIT MANUFACTURER/INSTALLER'S OPERATION AND MAINTENANCE MANUAL; INCLUDING OPERATION, MAINTENANCE, ADJUSTMENT, AND CLEANING INSTRUCTIONS; TROUBLE SHOOTING GUIDE; RENEWAL PARTS CATALOGS; AND ELECTRICAL WIRING DIAGRAMS.
F. WARRANTY: SUBMIT MANUFACTURER/INSTALLER'S STANDARD WARRANTY.

1.6 QUALITY ASSURANCE
A. MANUFACTURER/INSTALLER'S QUALIFICATIONS: SPECIALIZE IN MANUFACTURING AND INSTALLING ELEVATOR EQUIPMENT, WITH A MINIMUM OF 5 YEARS SUCCESSFUL EXPERIENCE.
B. REGULATORY REQUIREMENTS:
1. ELEVATOR DESIGN, CLEARANCES, CONSTRUCTION, WORKMANSHIP, MATERIALS, AND INSTALLATION, UNLESS SPECIFIED OTHERWISE, SHALL BE IN ACCORDANCE WITH ANSI/ASME A17.1, HANDICAP ACCESSIBILITY, AMERICANS WITH DISABILITIES ACT, AND OTHER CODES HAVING LEGAL JURISDICTION.
2. ANSI/ASME A17.1 SHALL GOVERN, EXCEPT WHERE CODES HAVING LEGAL JURISDICTION INCLUDE MORE RIGID REQUIREMENTS OR CONFLICT WITH ANSI/ASME A17.1.
3. ELEVATOR SHALL FOLLOW DESIGN AND MANUFACTURING PROCEDURES CERTIFIED IN ACCORDANCE WITH ISO 9001-2000 TO MEET PRODUCT AND SERVICE REQUIREMENTS FOR QUALITY ASSURANCE FOR NEW PRODUCTS.
C. PRE-INSTALLATION MEETING:
1. CONVENE PRE-INSTALLATION MEETING BEFORE START OF INSTALLATION OF ELEVATORS.
2. REQUIRE ATTENDANCE OF PARTIES DIRECTLY AFFECTING WORK OF THIS SECTION, INCLUDING CONTRACTOR, ARCHITECT, AND ELEVATOR MANUFACTURER/INSTALLER.
3. REVIEW EXAMINATION, INSTALLATION, FIELD QUALITY CONTROL, ADJUSTING, CLEANING, PROTECTION, AND COORDINATION WITH OTHER WORK.

1.6 DELIVERY, STORAGE, AND HANDLING

A. DELIVERY: DELIVER MATERIALS TO SITE IN MANUFACTURER/INSTALLER'S ORIGINAL, UNOPENED CONTAINERS AND PACKAGING, WITH LABELS CLEARLY IDENTIFYING PRODUCT NAME AND MANUFACTURER/INSTALLER.
B. STORAGE: STORE MATERIALS IN CLEAN, DRY AREA INDOORS IN ACCORDANCE WITH MANUFACTURER/INSTALLER'S INSTRUCTIONS.
C. HANDLING: PROTECT MATERIALS DURING HANDLING AND INSTALLATION TO PREVENT DAMAGE.

1.7 PROJECT CONDITIONS

A. TEMPORARY ELECTRICITY:
1. OWNER WILL ARRANGE FOR TEMPORARY 3-PHASE ELECTRICITY TO BE AVAILABLE FOR INSTALLATION OF ELEVATOR COMPONENTS.
2. COMPLY WITH SECTION 01 51 00 – TEMPORARY UTILITIES.
B. TEMPORARY USE OF ELEVATOR:
1. OWNER WILL NEGOTIATE WITH MANUFACTURER/INSTALLER FOR TEMPORARY USE OF ELEVATOR, IF REQUIRED.
2. TEMPORARY USE OF ELEVATOR SHALL BE IN ACCORDANCE WITH TERMS AND CONDITIONS OF MANUFACTURER/INSTALLER'S TEMPORARY ACCEPTANCE FORM.

1.9 SCHEDULING

A. COORDINATE ELEVATOR WORK WITH WORK OF OTHER TRADES, FOR PROPER TIME AND SEQUENCE TO AVOID CONSTRUCTION DELAYS.

1.10 WARRANTY

A. MANUFACTURER/INSTALLER SHALL GUARANTEE MATERIALS AND WORKMANSHIP OF EQUIPMENT INSTALLED UNDER THESE SPECIFICATIONS AND MAKE GOOD, DEFECTS NOT DUE TO ORDINARY WEAR OR TO IMPROPER USE, WHICH MAY DEVELOP WITHIN 1 YEAR AFTER COMPLETION OF INSTALLATION OR ACCEPTANCE THEREOF BY BENEFICIAL USE, WHICHEVER IS EARLIER.

1.11 MAINTENANCE SERVICE

A. ELEVATOR MAINTENANCE SERVICE SHALL BE PERFORMED BY ELEVATOR MANUFACTURER/INSTALLER.
B. ELEVATORS SHALL RECEIVE REGULAR MAINTENANCE ON EACH UNIT FOR PERIOD OF 3 MONTHS AFTER COMPLETION OF WORK SPECIFIED HEREIN OR ACCEPTANCE THEREOF BY BENEFICIAL USE, WHICHEVER IS EARLIER.
C. TRAINED EMPLOYEES SHALL MAKE PERIODIC EXAMINATIONS AND PERFORM WORK INCLUDING NECESSARY ADJUSTING, GREASING, OILING, AND REPLACING PARTS TO KEEP ELEVATORS IN OPERATION, EXCEPT PARTS THAT REQUIRE REPLACEMENT BECAUSE OF ACCIDENTS, VANDALISM, MISUSE, OR NEGLIGENCE BY PARTIES OTHER THAN MANUFACTURER/INSTALLER.
D. MANUFACTURER/INSTALLER SHALL PERFORM ALL WORK, EXCEPT EMERGENCY MINOR ADJUSTMENT CALL-BACK SERVICE, DURING REGULAR WORK HOURS. MANUFACTURER/INSTALLER SHALL PROVIDE EMERGENCY MINOR ADJUSTMENT CALL-BACK SERVICE, DURING REGULAR WORK HOURS.
E. SHOULD OWNER REQUEST THAT EXAMINATIONS, CLEANING, LUBRICATION, ADJUSTMENTS, REPAIRS, REPLACEMENTS, OR EMERGENCY MINOR ADJUSTMENT CALL-BACK SERVICE, UNLESS SPECIFIED HEREIN, BE PERFORMED ON OTHER THAN MANUFACTURER/INSTALLER'S REGULAR WORKING HOURS OF REGULAR WORKING DAYS, MANUFACTURER/INSTALLER SHALL ABSORB STRAIGHT-TIME LABOR CHARGES AND OWNER WILL COMPENSATE MANUFACTURER/INSTALLER FOR OVERTIME PREMIUM, TRAVEL TIME, AND EXPENSE AT NORMAL BILLING RATES.
F. ELEVATOR CONTROL SYSTEM:
1. INCLUDE BUILT-IN REMOTE DIAGNOSTIC MODULE TO RELAY CONSTANT STATUS OF ELEVATORS AND CONTROL SYSTEM TO A 24-HOUR, 7-DAYS-A-WEEK CENTRAL-MONITORING FACILITY.
2. REMOTE MONITORING DEVICE: TRANSMIT INFORMATION ON CURRENT STATUS OF ELEVATORS, INCLUDING MALFUNCTIONS, SYSTEM ERRORS, AND SHUTDOWN.

PART 2 PRODUCTS

2.1 MANUFACTURER/INSTALLER

A. SCHINDLER ELEVATOR CORPORATION, WEBSITE WWW.US.SCHINDLER.COM.
B. ELEVATOR SHALL BE INSTALLED BY ELEVATOR MANUFACTURER.

2.2 ELEVATOR SYSTEM AND COMPONENTS

A. HYDRAULIC PASSENGER ELEVATORS: MODEL 330A.
B. ELEVATOR EQUIPMENT SUMMARY:
1. APPLICATION: HOLELESS DUAL PISTON
2. SERVICE: HOSPITAL/SERVICE- CLASS A LOADING
3. QUANTITY: 2 UNITS
4. CAPACITIES: 5000, AND 2500 LBS RESPECTIVELY
5. SPEED: 100 FPM
6. TRAVEL: 12' 0" – BOTH ELEVATORS
7. LANDINGS: 2 – BOTH ELEVATORS
8. FRONT OPENINGS: 2 – BOTH ELEVATORS
9. REAR OPENINGS: 0
10. OPERATION: MICROPROCESSOR TWO CARS AUTOMATIC OPERATION
11. MACHINE ROOM: ADJACENT TO ELEVATOR HOISTWAYS
12. PLATFORM SIZE: 5000 LBS: 6'-0" X 9'-4½", 2500 LBS 7'-0" WIDE X 5'-14" DEEP
13. DOOR TYPE: TWO SPEED SIDE OPENING
14. CAB HEIGHT: 8' 0"
15. GUIDE RAILS: EQUIVALENT TO 16 LB. PER FOOT
16. HOISTWAY ENTRANCES: 4' 0" WIDE X 7' 0" HIGH DOORS
17. POWER SUPPLY: 208 VOLTS 3 PHASE 60 HZ
C. ELEVATOR COMPONENTS:
1. ANTI-STALL FEATURE.
2. BRAILLE AND AUDIBLE SIGNALS.
3. DOOR OPEN AND CLOSE STALL PROTECTION.
4. EMERGENCY LIGHTING.
5. FIREFIGHTER'S SERVICE: SENSORS
6. INDEPENDENT SERVICE FEATURE.
7. INFRARED LIGHT CURTAIN DOOR PROTECTION.
8. LOW OIL RETURN.
9. OVERLOAD SENSORS.
10. PHASE PROTECTION.
11. SOFT START ELECTRONIC STARTING
12. LOCKING SERVICE PANEL IN CAR OPERATING PANEL.
13. PRESSURE SWITCH.
14. REMOTE MONITORING CAPABLE.
15. BATTERY POWERED LOWERING RESCUE FEATURE.
16. TELEPHONE (ADA COMPLIANT).

2.3 ELEVATOR MATERIALS

A. FINISH:
1. STAINLESS STEEL AND BRONZE: #4 SATIN OR #8 MIRROR FINISH.
2. BAKED ENAMEL COLORS: MANUFACTURER/INSTALLER'S STANDARD COLOR SELECTIONS.
3. EXPOSED ALUMINUM FRAMES IN SUSPENDED CEILINGS: ANODIZED.
B. PLASTIC LAMINATES:
1. TYPE: GENERAL PURPOSE.
2. FLAME SPREAD RATINGS: AS REQUIRED BY CODE.
3. PATTERN: SELECT FROM ELEVATOR MANUFACTURER/INSTALLER'S STANDARD SELECTION.
C. UL OR CSA APPROVED: MOTORS, PUMPS, VALVES, FLUID TANK, HYDRAULIC FLUID, MICROPROCESSOR CONTROLLER, CONTROLS, PUSHBUTTONS, AND WIRING.
D. SPRING BUFFERS, ATTACHMENT BRACKETS, AND ANCHORS: DESIGN AND SIZE ACCORDING TO BUILDING CODE WITH SAFETY FACTORS.
E. PUMP: POSITIVE DISPLACEMENT SCREW TYPE, DESIGN FOR STEADY DISCHARGE WITH MINIMAL PULSATIONS.
F. MUFFLER: REDUCE NOISE TRANSMISSION.
G. TELESCOPIC HOLELESS JACK SYSTEM:
1. JACK CYLINDER: TWO JACKS, ONE LOCATED AT EACH SIDE OF THE CAR AND MOUNTED TO THE ELEVATOR CAR STRUCTURE.
2 SYNCHRONIZATION OF JACK STAGES: DIRECT MECHANICAL MEANS TO ENSURE ELEVATOR MOVES AT STEADY SPEED AND PROVIDES SMOOTH RIDE.

2.4 ELEVATOR CABS

A. HEIGHT: 8' 0" FROM FINISHED FLOOR TO UNDERSIDE OF CANOPY.
B. ELEVATOR CAR ENCLOSURE WALL SECTIONS:
1. CAB WALL: STEEL - PAINTED FINISH.
C. BASE, FRIEZE, AND REVEALS: PAINTED.
D. CEILING:
1. SUSPENDED WITH CONCEALED FRAME WITH PAINTED FINISH.
2. LIGHTING: FLUORESCENT.
E. CAB RETURNS: INTEGRAL CONSTRUCTION.
1. FINISH: #4 STAINLESS STEEL.
F. TRANSOMS:
1. RUN FULL WIDTH OF CAB.
2. FINISH: #4 STAINLESS STEEL.
G. CAB DOORS:
1. FLUSH DESIGN BOTH SIDES.
2. RIB CONSTRUCTION.
3. FINISH: #4 STAINLESS STEEL.
H. EXHAUST FAN:
1. SINGLE SPEED.
2. MOUNT IN CAB TRANSOM OR CANOPY.
I. HANDRAIL:
1. 1/2" X 2" FLAT IN BRUSHED ALUMINUM.
2. MOUNT ON REAR & SIDE WALLS.
J. THRESHOLD: ALUMINUM.
K. CAB FINISH FLOORING: AS SPECIFIED IN FINISH SCHEDULE IN DRAWINGS.

2.5 HOISTWAY ENTRANCES

A. HOISTWAY DOORS AND FRAMES:
1. UL RATED WITH REQUIRED FIRE RATING.
2. DOORS: RIGID FLUSH PANEL CONSTRUCTION WITH SOUND-DEADENING MATERIAL.
3. FRAMES: SECURELY FASTEN AT CORNERS TO FORM UNIT FRAME. FRAMES SHALL BE BOLTED.
B. EXPOSED AREAS OF CORRIDOR FRAMES: SEE FINISH SCHEDULE
C. DOORS: #4 STAINLESS STEEL - ALL FLOORS
D. SILLS: ALUMINUM

2.6 CAB FIXTURES

A. MAIN CAR OPERATING PANEL:
1. MOUNT IN RETURN.
2. COMPLY WITH HANDICAP REQUIREMENTS.
3. INCLUDE PUSHBUTTONS AND ILLUMINATING INDICATIONS FOR EACH FLOOR SERVED.
4. EMERGENCY BUTTONS AND SWITCHES: PROVIDE IN ACCORDANCE WITH CODE.
5. SWITCHES FOR CAR LIGHT AND ACCESSORIES.
B. CAB FIXTURES:
1. CAR LANTERN(S).
2. DIGITAL CAR POSITION INDICATOR.
3. LOCKING SERVICE PANEL IN CAR OPERATING PANEL.
4. TELEPHONE (ADA COMPLIANT).

2.7 HALL FIXTURES

A. PUSHBUTTONS:
1. UP BUTTON AND DOWN BUTTON AT INTERMEDIATE FLOORS.
2. SINGLE BUTTON AT EACH TERMINAL FLOOR.
3. HEIGHT: COMPLY WITH HANDICAP REQUIREMENTS.
B. HALL FIXTURE FINISH: BLACK LEXAN®.
C. FIXTURE COVER PLATES: MOUNT WITH TAMPER-RESISTANT SCREWS (TORX CENTER PIN REJECTION) IN SAME FINISH AS FIXTURE.

PART 3 EXECUTION

3.1 EXAMINATION

A. EXAMINE HOISTWAYS, HOISTWAY OPENINGS, PITS, AND MACHINE ROOMS BEFORE STARTING ELEVATOR INSTALLATION.
B. VERIFY HOISTWAY, PIT, MACHINE ROOM, AND OPENINGS ARE OF CORRECT SIZE, WITHIN TOLERANCES, AND ARE READY FOR WORK OF THIS SECTION.
C. VERIFY WALLS AND SILL SUPPORTS ARE PLUMB, WHERE OPENINGS OCCUR.
D. VERIFY HOISTWAY IS CLEAR AND PLUMB, WITH MAXIMUM VARIATION OF 1/2" AT ANY POINT.
E. VERIFY MINIMUM 2-HOUR FIRE-RESISTANCE RATING OF HATCH WALLS.
F. NOTIFY ARCHITECT IN WRITING OF DIMENSIONAL DISCREPANCIES OR OTHER CONDITIONS DETRIMENTAL TO PROPER INSTALLATION OR PERFORMANCE OF ELEVATORS.
G. DO NOT PROCEED WITH ELEVATOR INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED IN A MANNER ACCEPTABLE TO MANUFACTURER/INSTALLER.

3.2 INSTALLATION

A. INSTALL ELEVATORS IN ACCORDANCE WITH MANUFACTURER/INSTALLER'S INSTRUCTIONS AND ANSI/ASME A17.1.
B. SET ENTRANCES IN VERTICAL ALIGNMENT WITH CAR OPENINGS, AND ALIGNED WITH PLUMB HOISTWAY LINES.

3.3 FIELD QUALITY CONTROL

A. PERFORM TESTS OF ELEVATOR AS REQUIRED BY ANSI/ASME A17.1 AND GOVERNING CODES.

3.4 ADJUSTING

A. ADJUST ELEVATORS FOR PROPER OPERATION IN ACCORDANCE WITH MANUFACTURER/INSTALLER'S INSTRUCTIONS.
B. ADJUST ELEVATORS FOR SMOOTH ACCELERATION AND DECELERATION OF CAR SO NOT TO CAUSE PASSENGER DISCOMFORT.
C. ADJUST DOORS TO PREVENT OPENING OF DOORS AT LANDING ON CORRIDOR SIDE, UNLESS CAR IS AT REST AT THAT LANDING, OR IS IN LEVELING ZONE AND STOPPING AT THAT LANDING.
D. ADJUST AUTOMATIC FLOOR LEVELING FEATURE AT EACH FLOOR TO WITHIN 1/4 INCH OF LANDING.
E. REPAIR MINOR DAMAGES TO FINISH IN ACCORDANCE WITH MANUFACTURER/INSTALLER'S INSTRUCTIONS AND AS APPROVED BY ARCHITECT.
F. REMOVE AND REPLACE DAMAGED COMPONENTS THAT CANNOT BE SUCCESSFULLY REPAIRED AS DETERMINED BY ARCHITECT.

3.5 CLEANING

A. CLEAN ELEVATORS PROMPTLY AFTER INSTALLATION IN ACCORDANCE WITH MANUFACTURER/INSTALLER'S INSTRUCTIONS.
B. DO NOT USE HARSH CLEANING MATERIALS OR METHODS THAT COULD DAMAGE FINISH.

3.6 PROTECTION

A. PROTECT INSTALLED ELEVATORS FROM DAMAGE DURING CONSTRUCTION.

END OF SECTION

<u>DIVISION 31 – EARTHWORK</u>

SECTION 31 20 00 – EARTH MOVING

PART 1. GENERAL

1.01 SECTION INCLUDES

A.SITE GRADING, REMOVAL OF TOPSOIL AND SUBSOIL, BUILDING EXCAVATING AND TRENCHES, BACKFILLING AND COMPACTING.

PART 2 PRODUCTS

2.01 SOIL MATERIALS

<u>NOTE:</u> ALL SOILS TYPES THAT EXIST, OR ARE TO BE USED, IN THIS PROJECT ARE NOTED IN THE GEOTECHNICAL REPORT FOR THIS PROJECT. CONTRACTOR SHALL REFER TO THE REPORT AND NOTES ON THE CIVIL AND STRUCTURAL DRAWINGS, FOR INFORMATION RELATED TO THIS SECTION.

A. TOPSOIL: REUSABLE EXCAVATED OR IMPORTED FRIABLE LOAM & FREE OF SUBSOIL, ROOTS, GRASS, EXCESSIVE AMOUNT OF WEEDS, LARGE STONE, AND FOREIGN MATTER.
B. SUBSOIL: MATERIAL, GRADED FREE OF LUMPS LARGER THAN 6 INCHES, ROCKS LARGER THAN 3 INCHES AND DEBRIS.

2.02FILL MATERIALS

A. TYPE A - COARSE STONE OR GRAVEL: CRUSHED, WASHED NATURAL STONE & FREE OF SHALE, CLAY, FRIABLE MATERIAL, SAND, DEBRIS & GRADED WITHIN THE FOLLOWING LIMITS:
1.MINIMUM SIZE: 1/2 INCH
2.MAXIMUM SIZE: 2 INCHES
B. TYPE B - SAND: NATURAL RIVER OR BANK SAND; FREE OF SILT, CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS, AND ORGANIC MATTER.
C. TYPE C - SUBSOIL: FREE OF ROCK LARGER THAN 3 INCH SIZE, AND DEBRIS.

PART 3EXECUTION

3.01EXAMINATION AND PREPARATION

A. IDENTIFY REQUIRED LINES, LEVELS, CONTOURS, AND DATUM.
B. NOTIFY ENGINEER OF UNEXPECTED SUBSURFACE CONDITIONS AND DISCONTINUE AFFECTED WORK IN AREA UNTIL NOTIFIED TO RESUME WORK.
C. IDENTIFY AND FLAG KNOWN UTILITY LOCATIONS. NOTIFY UTILITY COMPANY TO REMOVE AND RELOCATE UTILITIES.
D. MAINTAIN AND PROTECT EXISTING UTILITIES TO REMAIN.
E. VERIFY FOUNDATION OR BASEMENT WALLS ARE BRACED TO SUPPORT SURCHARGE FORCES IMPOSED BY BACKFILLING OPERATIONS.

3.02 PROTECTION OF ADJACENT WORK

A. UNDERPIN ADJACENT STRUCTURES WHICH MAY BE DAMAGED BY EXCAVATION WORK, INCLUDING SERVICE UTILITIES AND PIPE CHASES.
B. GRADE EXCAVATION TOP PERIMETER TO PREVENT SURFACE WATER RUN-OFF INTO EXCAVATION OR TO ADJACENT PROPERTIES.

3.03 TOPSOIL EXCAVATION

A. DO NOT EXCAVATE WET TOPSOIL.
B.EXCAVATE TOPSOIL AND STOCKPILE IN AREA DESIGNATED ON SITE REMOVE EXCESS TOPSOIL NOT BEING REUSED FROM SITE.

3.04 SUBSOIL EXCAVATION

A. DO NOT REMOVE WET SUBSOIL.
B. EXCAVATE SUBSOIL FROM MARKED AREAS REQUIRED FOR BUILDING FOUNDATIONS, PILING, CONSTRUCTION OPERATIONS, AND OTHER WORK.
C. SLOPE BANKS TO ANGLE OF REPOSE OR LESS, UNTIL SHORED.
D. EXCAVATION SHALL NOT INTERFERE WITH 45 DEGREE BEARING SPLAY OF ANY FOUNDATION.
E. RESTORE TO PRIOR EXISTING CONDITIONS OR BETTER, ALL UNAUTHORIZED EXCAVATION AT NO EXTRA COST TO OWNER.

F. FILL OVER-EXCAVATED AREAS UNDER STRUCTURE BEARING SURFACES IN ACCORDANCE WITH DIRECTION BY STRUCTURAL AND / OR CIVIL ENGINEER.
G. STOCKPILE SUBSOIL IN AREA DESIGNATED ON SITE. REMOVE EXCESS SUBSOIL NOT BEING REUSED FROM SITE.

3.05 TRENCHES

A. EXCAVATE FOR STORM SEWER, SANITARY SEWER, AND WATER GAS PIPING TO MUNICIPAL UTILITIES.
B. CUT TRENCHES SUFFICIENTLY WIDE TO ENABLE INSTALLATION OF UTILITIES AND TO ALLOW INSPECTION.
C. HAND TRIM EXCAVATION AND LEAVE FREE OF LOOSE MATTER. HAND TRIM FOR BELL AND SPIGOT PIPE JOINTS.
D. SUPPORT PIPE AND CONDUIT DURING PLACEMENT AND COMPACTION OF BEDDING FILL.
E. BACKFILL TRENCHES TO REQUIRED CONTOURS AND ELEVATIONS.

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LICENSED ARCHITECT
JEFFREY NIELSEN BYERS
No. 7272045
STATE OF UTAH

Sept. 23, 2016

CONSULTANT:

T.C. ENTERPRISE

OWNER:

PARDOE ASSISTED LIVING - MIDVALE
6968 SOUTH 700 WEST
MIDVALE, UTAH 84095

PROJECT:

DATE	DESCRIPTION
6/29/2016	CITY SUBMITTAL
9/9/2016	CITY COMMENTS

PROJECT #: 14-288.01
DRAWN BY: Author
CHECKED BY: Checker

SPECIFICATIONS

SHEET #
G016

F. PLACE AND COMPACT FILL MATERIALS AS FOR BACKFILLING.
G. COMPLY WITH ALL OSHA REQUIREMENTS FOR SAFETY RELATED TO TRENCHES.

3.06 BACKFILLING

A. BACKFILL AREAS TO CONTOURS AND ELEVATIONS. USE UNFROZEN AND UNSATURATED MATERIALS.
B. BACKFILL SYSTEMATICALLY, AS EARLY AS POSSIBLE, TO ALLOW MAXIMUM TIME FOR NATURAL SETTLEMENT. DO NOT BACKFILL OVER POROUS, WET, FROZEN, OR SPONGY SUBGRADE SURFACES. INFORM CIVIL ENGINEER AND ARCHITECT OF SUBSOIL CONDITIONS THAT ARE NOT MEETING SPECIFICATION REQUIREMENTS FOR SOLUTION TO PROBLEMS.
C. PLACE GEOTEXTILE FABRIC OVER UNSTABLE SUBSOIL.
D. PLACE AND COMPACT FILL MATERIALS IN CONTINUOUS LAYERS NOT EXCEEDING 8 INCHES LOOSE DEPTH.
E. EMPLOY A PLACEMENT METHOD SO AS NOT TO DISTURB OR DAMAGE FOUNDATIONS OR UTILITIES IN TRENCHES.
F. MAINTAIN OPTIMUM MOISTURE CONTENT OF BACKFILL MATERIALS TO ATTAIN REQUIRED COMPACTION DENSITY.
G. BACKFILL AGAINST SUPPORTED FOUNDATION WALLS. BACKFILL SIMULTANEOUSLY ON EACH SIDE OF UNSUPPORTED FOUNDATION WALLS UNTIL SUPPORTS ARE IN PLACE.
H. SLOPE GRADE AWAY FROM BUILDING MINIMUM 2 INCHES IN 10 FEET, UNLESS NOTED OTHERWISE.

3.07PLACING TOPSOIL

A. PLACE TOPSOIL IN AREAS WHERE SEEDING, SODDING, OR PLANTING IS SCHEDULED.
B. FINE GRADE TOPSOIL ELIMINATING ROUGH OR LOW AREAS. MAINTAIN LEVELS, PROFILES, AND CONTOURS OF SUBGRADE.
C. REMOVE LARGE STONE, ROOTS, GRASS, WEEDS, DEBRIS, AND FOREIGN MATERIAL WHILE SPREADING.
D. LIGHTLY COMPACT ROLL PLACED TOPSOIL.
E. LEAVE STOCKPILE AREA AND SITE CLEAN AND RAKED, READY TO RECEIVE LANDSCAPING.

3.08 TESTS

A. TESTS AND ANALYSIS OF FILL MATERIAL WILL BE PERFORMED IN ACCORDANCE WITH ANSI/ASTM D698 D1557

3.09 TOLERANCES

A. TOP SURFACE OF EXPOSED SUBGRADE: PLUS OR MINUS ONE INCH.
B. TOP OF TOPSOIL: PLUS OR MINUS 1/2 INCH.

3.10 SCHEDULE

A. INTERIOR SLAB-ON-GRADE: TYPE C FILL, COMPACTED TO 95 PERCENT & WITH COVER OF TYPE B FILL, 4 INCHES THICK, COMPACTED TO 95 PERCENT.
B. EXTERIOR SIDE OF FOUNDATION WALLS AND RETAINING WALLS: TYPE A FILL, TO SUBGRADE ELEVATION, EACH LIFT COMPACTED TO 90 PERCENT.
C. FILL UNDER LANDSCAPED AREAS: TYPE C FILL, TO 6 INCHES BELOW FINISH GRADE, COMPACTED TO 90 PERCENT.
D. FILL UNDER CONCRETE WALKS: TYPE C FILL, TO 9 INCHES BELOW FINISH PAVING ELEVATION, COMPACTED TO 95 PERCENT.

SECTION 32 13 00 – PAVING AND SURFACING

PART 1. GENERAL

1.01 WORK INCLUDES

A. PAVEMENT
B. CONCRETE WALKS, OUTDOOR DINING AREA AND RAMPS
C. CONCRETE CURBS
D. PARKING STALL WHEEL STOPS
E. STRIPING AND PAINT SYMBOLS
F. HANDICAP SIGNS

PART 2PRODUCTS

2.01 PAVEMENT

A. ASPHALT CONCRETE PAVING: SEE SOILS REPORT FOR DESIGN RECOMMENDATIONS OF SUBBASE AND FINISH WEARING SURFACE THICKNESS.
B. CONCRETE PAVING: SEE SOILS REPORT FOR DESIGN RECOMMENDATION OF SUBGRADE AND CONCRETE THICKNESS, DESIGN STRENGTH, EXPANSION AND CONSTRUCTION JOINTS LOCATIONS.

C. ALL EXTERIOR FLATWORK SHALL HAVE EXPANSION JOINTS AT 20 FEET APART MAXIMUM AND SCORE MARKS AS INDICATED ON DRAWINGS.

2.02 CONCRETE WALKS, OUTDOOR DINING AREAS AND RAMPS

A. EXPOSED CONCRETE TO RECEIVE LIGHT BROOM FINISH
B. RAMPS WITH GREATER THAN ONE TO TWENTY SLOPE SHALL HAVE A SLIP RESISTANT FINISH OR HEAVY BROOM FINISH PERPENDICULAR TO SLOPE.
C. ALL EXTERIOR FLATWORK SHALL HAVE EXPANSION JOINTS AT 20 FEET APART MAXIMUM AND SCORE MARKS AS INDICATED ON DRAWINGS.
D. ALL EXTERIOR FLATWORK, STAIRS, RAMPS, CURBS, CURB CUTS, ETC. TO COMPLY WITH ADA REQUIREMENTS, PER NATIONAL LAWS, AND LOCAL REVISIONS, WHICHEVER IS THE MOST COSTLY OR STRINGENT.

2.03 CONCRETE CURBS

A. A CONCRETE CURB SHALL BE THE SIZE AS SHOWN ON DRAWINGS FORMED WITH EXPANSION JOINTS OR SAW CUTS NOT MORE THAN 20 FEET APART AND AT TANGENT OF RADIUS CORNERS.

2.04 PARKING STALL WHEEL STOPS

A. PRE-CAST CONCRETE 6"W X 5"H X 4'-0" OR 6'-0" LONG WITH 2" PIPE ANCHORS SHALL BE INSTALLED AS SHOWN ON DRAWINGS.

2.05 STRIPING AND PAINT SYMBOLS

A. PAVEMENT MARKINGS, MISC. PARKING ITEMS TO BE PAINTED:
1. PARKING STALL LINES 4" WIDE WHITE
2. ALL LIGHT STANDARD BASES WHITE
3. ALL DIRECTIONAL ARROWS24" WIDE YELLOW
4. PEDESTRIAN CROSS WALK LINES 12" WIDE YELLOW
5. ALL GUARD POSTS YELLOW
6. SAFETY RAILING YELLOW
7. HANDICAP SYMBOL WHITE WITH BLUE BACKGROUND
B. USE O.S.H.A. SAFETY COLORS BY SHERWIN-WILLIAMS OR PRATT & LAMBERT.

2.06 HANDICAP SIGNS

A. REFLECTORIZED SIGN CONSTRUCTED OF PORCELAIN ON STEEL, BEADED TEXT, DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY, NOT LESS THAN 70 SQUARE INCHES IN AREA. MOUNT ON METAL POLE OR TUBE WITH BOTTOM AT 80 INCHES ABOVE GRADE OR MOUNT ON BUILDING WALL WHERE SHOWN ON DRAWINGS.

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