

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

1. ENERGY COMPLIANCE

FIXED WINDOWS (GLASS) SHALL BE SEALED TO LIMIT AIR INFILTRATION.

HOLLOW METAL OR SOLID CORE WOOD DOORS: PROVIDE VINYL OR SHEET METAL WEATHER SEAL AT HEAD, JAMB AND SILL AT ALL EXTERIOR DOORS.

EXTERIOR STORE FRONT HINGED DOORS: PROVIDE VINYL SEAL AT SILL AND CONTINUOUS PILE WEATHER-STRIP VERTICALLY AND AT TOP RAELS.

OPEN EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATION, BETWEEN WALLS AND ROOF, BETWEEN WALL PANELS, AT PENETRATION OF UTILITIES THROUGH THE ENVELOPE, SHALL BE SEALED CAULKED OR WEATHER-STRIPPED TO LIMIT AIR LEAKAGE.

2. BUILDING INSULATION

WORK INCLUDED: FURNISH AND INSTALL RIGID, THERMAL BATT, AND SOUND BATT INSULATION.

ROOF INSULATION: RIGID POLY-ISO INSULATION: R30 MINIMUM

BATT INSULATION: R-19, R-13, R-11 AS SHOWN ON PLANS. KRAFT FACED WITH STAPLING FLANGE FOR WOOD STUD WALL CONSTRUCTION, FOIL REINFORCED KRAFT FACING (FRK) WITH STAPLING FLANGE FOR WOOD STUD APPLICATION IN ATTIC AREAS (FS-25 WITH FLAME SPREAD OF 25), AS MANUFACTURED BY OWENS CORNING FIBERGLASS, OR EQUAL.

SOUND BATT INSULATION: NON-COMBUSTIBLE MINERAL FIBERGLASS BATTS WITH MINIMUM 3 1/2" THICKNESS.

VAPOR BARRIER: TRANSLUCENT POLYETHYLENE FILM FOR USE IN ABOVE GRADE BUILDING CONSTRUCTION, 6 MIL MINIMUM THICKNESS (INTERIOR ONLY)

3. MEMBRANE ROOFING

MATERIALS: PROVIDE DURO-LAST ROOFING AND BASE FLASHING AS MANUFACTURED BY DURO-LAST ROOFING SYSTEMS. PRODUCT AND INSTALLATION SHALL CONFORM TO MANUFACTURERS SPECIFICATION AND 2006 IBC CHAPTER 16 & TABLE 1507.10.2. REFER TO ROOF PLAN FOR ADDITIONAL INFORMATION.

INSTALLATION: ROOFING SHALL BE INSTALLED BY MANUFACTURER CERTIFIED INSTALLER. ROOFING SHALL BE INSTALLED OVER WOOD DECK OR INSULATED DECK, WHERE APPLICABLE, IN STRICT ACCORDANCE WITH THE MANUFACTURER'S LATEST RECOMMENDATIONS. PRIME ALL METAL FLASHING, ETC. THAT SHALL BE IN CONTACT WITH ROOFING MATERIALS.

WARRANTY: GENERAL CONTRACTOR SHALL FURNISH A FIFTEEN (15) YEAR, NO DOLLAR LIMIT (NDL) WARRANTY FOR THIS INSTALLATION.

4. FLASHING AND SHEET METAL

FURNISH AND INSTALL ALL FLASHING, SHEET METAL, PITCH POCKET PANS AND SCUPPERS NOT SPECIFICALLY DESCRIBED IN OTHER SECTIONS OF THESE SPECIFICATIONS. BUT REQUIRED TO PREVENT WATER PENETRATION THROUGH EXTERIOR BUILDING SHELL, INCLUDING FLASHING, CAPS, AND ROOF EQUIPMENT PLATFORM COVERS.

COMPLY WITH APPLICABLE RECOMMENDATIONS AND DETAILS OF THE "ARCHITECTURAL SHEET METAL MANUAL," BY SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA).

INSTALL SHEET METAL OVER A LAYER OF ROOFING FELT.

GALVANIZED IRON: SHEET METAL OR IRON SHALL BE A STANDARD BRAND OF OPEN HEARTH, COPPER-BEARING STEEL, COPPER-MOLYBDENUM IRON, OR PURE IRON SHEETS. USE 24 GAUGE MINIMUM UNLESS OTHERWISE CALLED FOR ON THE DRAWINGS.

ZINC COATING: ALL GALVANIZED SHEETS SHALL HAVE A ZINC COATING APPLIED BY HOT-DIP PROCESS TO ALL SURFACES. ZINC COATING SHALL WEIGH NOT LESS THAN 1.14 OUNCES PER SQ. FT. NOR MORE THAN 1.12 OUNCES PER SQ. FT. OF SURFACES COVERED AND SHALL CONFORM WITH ASTM A-95.

5. ROOF ACCESSORIES

THE WORK OF THIS SECTION INCLUDES THE PROVIDING AND INSTALLING OF ACCESSORIES TO BE INSTALLED ON THE ROOF AND FLASHED TO PROVIDE A WATERTIGHT INSTALLATION.

ROOF HATCH: BILCO, TYPE 'S-20', 2'-6" X 3'-0", GALVANIZED, BONDED FOR PAINTING.

6. CAULKING & SEALANTS

GENERAL BUILDING APPLICATIONS: FOR JOINTS WHERE MOVEMENT IS ANTICIPATED, USE A C. HORN HORNFLX (POLYSULFIDE) ONE COMPONENT SYSTEM IN THE COLOR WHICH MOST CLOSELY MATCHES THE ADJACENT SURFACES. SEALANT TO HAVE A SHORE 'A' HARDNESS OF 20 TO 30.

FOR DRY JOINTS BETWEEN DISSIMILAR MATERIALS WHERE LITTLE MOVEMENT IS ANTICIPATED, USE A C. HORN HORNSEAL ELASTOMERIC CAULK (BUTYL RUBBER) ONE COMPONENT SYSTEM IN THE COLOR WHICH MOST CLOSELY MATCHES ADJACENT SURFACES.

FOR GLAZING AND KITCHEN APPLICATIONS: GENERAL ELECTRIC SILPRUF SILICONE CONSTRUCTION 1200 SEALANT.

FOR SHEET METAL FLASHING AND COPING: GENERAL ELECTRIC SILPRUF SILICONE WEATHER PROOFING SEALANT.

THE GENERAL CONTRACTOR SHALL INCLUDE IN HIS WORK THE FOLLOWING: AFTER ALL EQUIPMENT AND WALL MATERIALS ARE INSTALLED, ALL JOINTS TO WALLS AND BASES SHALL BE SEALED WITH SILICONE SEALANT.

ALL INSIDE VERTICAL CERAMIC TILE CORNERS SHALL RECEIVE A TOOLED BEAD OF SILICONE SEALANT.

7. EIFS (EXTERIOR INSULATION AND FINISH SYSTEM)

WORK INCLUDED: ALL MATERIALS AND INSTALLATION OF AN EIFS SYSTEM.

DESIGN REQUIREMENTS: CONFORM IN ALL RESPECTS TO MANUFACTURER'S SPECIFICATIONS FOR MATERIALS AND INSTALLATION AND STO THERM INSULATION SPECIFICATION FOR STO THERM E100 ESSENCE SYSTEM.

DRYVIT MAY BE SUBSTITUTED AS AN ALTERNATE EIFS MANUFACTURER APPROVED IN WRITING BY PANDA EXPRESS.

MEET ALL LOCAL BUILDING CODE REQUIREMENTS.

MOISTURE CONTROL: PREVENT THERMOCUMULATIVE WATER BEHIND THE EIFS SYSTEM. EITHER BY PROVIDING A VAPOR BARRIER OR PROVIDING A DRAINAGE CONSTRUCTION. IN THE DESIGN AND INSTALLATION OF THE ASSEMBLY, CONFORM WITH ALL DETAILS OF THE MANUFACTURER'S SPECIFICATIONS.

IMPACT RESISTANCE: PROVIDE EXTRA-HIGH IMPACT RESISTANCE TO A MINIMUM HEIGHT OF 6'-0" ABOVE FINISH GRADE. ALL AREAS ACCESSIBLE TO PEDESTRIAN TRAFFIC AND OTHER AREAS EXPOSED TO ABNORMAL STRESS OR IMPACT, INDICATE THE AREAS WITH IMPACT RESISTANCE OTHER THAN "STANDARD" ON CONTRACT DRAWINGS.

COLOR SELECTION: AS SELECTED BY PANDA FROM MANUFACTURER'S STANDARD COLORS.

7. JOINTS: PER MANUFACTURER'S SPECIFICATION

8. GRADE CONDITION: DO NOT INSTALL EIFS BELOW GRADE.

9. PROJECTING ARCHITECTURAL FEATURES AND REVEALS: ALL TRIM AND PROJECTING ARCHITECTURAL FEATURES MUST HAVE A MINIMUM 1/2 SLOPE ALONG THEIR TOP SURFACE. ALL HORIZONTAL REVEALS MUST HAVE A MINIMUM 1/2 SLOPE ALONG THEIR BOTTOM SURFACE. INCREASE SLOPE FOR NORTHERN CLIMATES TO PREVENT ACCUMULATION OF ICE/SNOW AND WATER ON SURFACE WHERE TRIM FEATURE OR BOTTOM SURFACE OF REVEAL PROJECTS MORE THAN 2 INCHES FROM THE FACE OF THE EIFS WALL FLANGE. PROTECT THE TOP SURFACE WITH WATERPROOFING INSPECTION TAPE. PERMANENTLY INCREASED MAINTENANCE MAY BE REQUIRED TO MAINTAIN SURFACE INTEGRITY OF EIFS ON WEATHER EXPOSED SLOPED SURFACES.

10. INSULATION THICKNESS: MINIMUM EPS INSULATION THICKNESS IS 1 1/2 INCHES.

11. FIRE PROTECTION: REFER TO MANUFACTURER'S APPLICABLE CODE COMPLIANCE REPORT FOR LIMITATIONS THAT MAY APPLY.

C. QUALITY ASSURANCE:
1. MANUFACTURER REQUIREMENTS: MEMBER IN GOOD STANDING OF THE EIFS INDUSTRY MEMBERS ASSOCIATION (D) (EIM), SYSTEM MANUFACTURER FOR A MINIMUM OF TWENTY (25) YEARS, AND MANUFACTURING FACILITIES ISO 9001:2000 CERTIFIED QUALITY SYSTEM.

2. CONTRACTOR REQUIREMENTS: ENGAGED IN APPLICATION OF EIFS FOR A MINIMUM OF THREE (3) YEARS, AND EMPLOY SKILLED MECHANICS WHO ARE EXPERIENCED AND KNOWLEDGEABLE IN EIFS APPLICATION, AND DEMONSTRATE SUCCESSFUL COMPLETION OF MINIMUM OF THREE (3) PROJECTS OF SIMILAR SIZE AND COMPLEXITY TO THE SPECIFIED PROJECT.

3. INSULATION BOARD MANUFACTURER REQUIREMENTS: RECOGNIZED BY STO AS CAPABLE OF PRODUCING INSULATION BOARD, AND LISTED BY AN APPROVED AGENCY LABEL INSULATION BOARD WITH INFORMATION REQUIRED BY STO, THE APPROVED LISTING AGENCY AND THE APPLICABLE BUILDING CODE.

4. INSPECTIONS: PROVIDE INDEPENDENT THIRD PARTY INSPECTION WHERE REQUIRED BY CODE OR CONTRACT DOCUMENTS CONDUCT INSPECTIONS IN ACCORDANCE WITH CODE REQUIREMENTS AND CONTRACT DOCUMENTS.

D. DELIVERY STORAGE AND HANDLING: AS SPECIFIED BY MANUFACTURER.

E. COORDINATION: THE WORK IN THIS SECTION REQUIRES CLOSE COORDINATION WITH RELATED SECTIONS AND TRACES.

1. PROVIDE SITE GRADING SUCH THAT EIFS TERMINATES ABOVE FINISHED GRADE A MINIMUM OF 6 INCHES (150MM) OR AS REQUIRED BY CODE.

2. PROVIDE PROTECTION OF ROUGH OPENINGS BEFORE INSTALLING WINDOWS, DOORS AND OTHER PENETRATIONS THROUGH THE WALL AND PROVIDE SILL FLASHING.

3. INSTALL WINDOW AND DOOR HEAD FLASHING IMMEDIATELY AFTER WINDOWS AND DOORS ARE INSTALLED.

4. INSTALL DIVERTER FLASHING WHEREVER WATER CAN ENTER THE WALL ASSEMBLY TO DIRECT WATER TO THE EXTERIOR.

5. INSTALL COPINGS AND SEALANT IMMEDIATELY AFTER INSTALLATION OF THE EIFS SYSTEM AND WHEN EIFS COATINGS ARE DRY.

6. ATTACH PENETRATIONS THROUGH EIFS TO STRUCTURAL SUPPORT AND PROVIDE WATER TIGHT SEAL AT PENETRATIONS.

F. PRODUCTS: PROVIDE EIFS SYSTEM AND ACCESSORIES FROM SINGLE SOURCE 1. MANUFACTURER OR APPROVED SUPPLIER. THE FOLLOWING ARE ACCEPTABLE MANUFACTURERS: STO CORP. EIFS, OTHER MANUFACTURER IF APPROVED IN WRITING BY PANDA.

2. INSULATION BOARD: NOMINAL 1.0 LB/FT³ (16 KG/M³) EXPANDED POLYSTYRENE (EPS) INSULATION BOARD IN COMPLIANCE WITH ASTM E2430 AND ASTM C578 TYPE 1 REQUIREMENTS.

3. BASE COAT AS SPECIFIED BY MANUFACTURER.

4. REINFORCING MESHES AS SPECIFIED BY MANUFACTURER.

5. FINISH COAT: STO ESSENCE DPR FINISH, ACRYLIC BASED TEXTURED WALL COATING WITH GRADED MARBLE AGGREGATE AND DIRT PICK-UP RESISTANCE TECHNOLOGY.

G. EXECUTION:
1. INSTALLATION: INSTALL EIFS IN COMPLIANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS.

2. PROTECTION: PROVIDE PROTECTION OF INSTALLED MATERIALS FROM WATER INFILTRATION INTO OR BEHIND THEM. PROVIDE PROTECTION OF INSTALLED MATERIALS FROM DUST, DIRT, PRECIPITATION, FREEZING AND CONTINUOUS HIGH HUMIDITY UNTIL THEY ARE FULLY DRY.

8. ALUMINUM COMPOSITE METAL WALL PANELS (ACM)

A. PERFORMANCE REQUIREMENTS: PROVIDE COMPOSITE METAL PANELS WHICH HAVE BEEN MANUFACTURED, FABRICATED AND INSTALLED TO WITHSTAND LOADS FROM DEFLECTION AND THERMAL MOVEMENT TO SATISFY CODE REQUIREMENTS AND TO MAINTAIN PERFORMANCE CRITERIA STATED BY MANUFACTURER WITHOUT DEFECTS, DAMAGE OR FAILURE.

B. SUBMITTALS: SUBMIT TO PANDA PRODUCT INFORMATION AND SHOP DRAWINGS SHOWING LAYOUT, PROFILES, PRODUCT COMPONENTS INCLUDING ANCHORAGE, ACCESSORIES, FINISHES, FLOORS AND TEXTURES.

C. QUALITY ASSURANCE: SUBMIT CERTIFIED TEST REPORTS DEMONSTRATING COMPLIANCE WITH MANUFACTURER'S RECOMMENDED BUILDING CODE REQUIREMENTS. SUBMIT MANUFACTURER QUALIFICATIONS DEMONSTRATING EXPERIENCE IN PERFORMING SIMILAR PROJECTS OF SIMILAR TYPE AND SIZE. OBTAIN PANELS FROM A SINGLE MANUFACTURER.

D. WARRANTY: SUBMIT ONE YEAR WARRANTY FOR MATERIALS AND WORKMANSHIP. E. DELIVER MATERIALS BY MANUFACTURER'S ORIGINAL UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS. IN CONTACT PANELS DURING CONSTRUCTION BY APPLYING HEAVY DUTY REMOVABLE PLASTIC FILM. EXERCISE CARE IN UNLOADING, STORAGE AND INSTALLING PANELS TO PREVENT BENDING, CRACKING, TWISTING AND SURFACE DAMAGE.

F. FIELD MEASUREMENTS: VERIFY ACTUAL MEASUREMENTS AND OPENINGS BEFORE FABRICATION. SHOW RECORDED FIELD MEASUREMENTS ON SHOP DRAWINGS. COORDINATE FIELD DIMENSIONS AND CONDITIONS.

G. MANUFACTURER: PROVIDE PANELS MANUFACTURED BY MITSUBISHI PLASTICS COMPOSITES OF AMERICA; ALPOLIC COMPOSITE METAL PANELS (WWW.ALPOLIC-NORTHAMERICA.COM). SUBSTITUTIONS WILL BE CONSIDERED, BUT CONTRACTOR MUST OBTAIN WRITTEN APPROVAL FROM PANDA BEFORE SUBMITTING FINAL BID.

H. PANELS SHALL BE 4MM THICK SYSTEM. INSTALLATION OF ANY PANEL NEEDS TO BE EASILY REMOVED AND REPLACED. ANY PANEL SHALL BE ABLE TO BE REMOVED WITHOUT HAVING TO REMOVE ANY OTHER ADJACENT PANEL. FIRST FACTORY FINISH SHALL BE FLUOROPOLYMER PAINT FINISH THAT MEETS OR EXCEEDS VALUES EXPRESSED IN AAMA 2605.

J. PROTECT PANELS DURING DELIVERY, STORAGE AND ERECTION. PROTECT ADJACENT BUILDING SURFACES DURING ERECTION.

L. INSTALL PANELS PLUMB, LEVEL, TRUE IN COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS AND TO TOLERANCES OF MAXIMUM DEVIATION FROM HORIZONTAL AND VERTICAL OF .25 INCH IN 20 FEET, NON CUMULATIVE COMPLY WITH MANUFACTURER'S INSTRUCTIONS AND INSTALL IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS.

K. REMOVE AND REPLACE PANELS BEYOND REPAIR AS DETERMINED BY PANDA.

L. CLEANING: REMOVE PROTECTIVE FILM IMMEDIATELY AFTER INSTALLATION OF JOINT SEALERS AND IMMEDIATELY PRIOR TO COMPLETION OF ACM WORK. FINAL CLEAN ACM PANELS, REMOVE CONSTRUCTION DEBRIS FROM PROJECT SITE AND LEGALLY DISPOSE OFF SITE.

9. VAPOR BARRIER

ALL EXTERIOR SHEATHING SHOWN IN DRAWINGS CALLED OUT TO RECEIVE "WRB" (WATER RESISTIVE BARRIER) OR VAPOR BARRIER SHALL RECEIVE THE FOLLOWING:

MANUFACTURER: STO CORPORATION (www.stocorp.com)

SPECIFICATION: STO GUARD WITH GOLD COAT A1000G

SUBSTITUTIONS: NOT ALLOWED

INSTALLATION: INSTALL PER MANUFACTURER'S INSTRUCTIONS/SPECIFICATIONS

10. WATERPROOFING MEMBRANE BEHIND COMPOSITE DECKING

ALL EXTERIOR SHEATHING SHOWN IN DRAWINGS CALLED OUT TO RECEIVE "WATER PROOFING" LOCATED SPECIFICALLY BEHIND ALL COMPOSITE WOOD DECKING SIDING SHALL RECEIVE THE FOLLOWING:

MANUFACTURER: BASF (www.master-builders-solutions.basf.us/en-us/products/masteseal/1991)

SPECIFICATION: MASTERSEAL HLM 5000

SUBSTITUTIONS: NOT ALLOWED

INSTALLATION: INSTALL PER MANUFACTURER'S INSTRUCTIONS/SPECIFICATIONS - REF. TO CUT SHEET BELOW



We create chemistry

Technical Data Guide



MasterSeal® HLM 5000

Liquid, cold-applied elastomeric waterproofing membrane system

DESCRIPTION
MasterSeal HLM 5000 is a one component, non-solvent, cold-applied, elastomeric, waterproofing membrane for interior and exterior applications. It is available in two grades:
MasterSeal HLM 5000 (2.0) (self-healing elastomeric waterproofing membrane) MasterSeal HLM 5000 (1.0) (flexible)

PROPERTIES
• Flexible waterproofing membrane
• Water-repellent membrane for interior and exterior applications
• Excellent adhesion to concrete, masonry, metal, wood, and other substrates
• Wide section thicknesses available
• MasterSeal HLM 5000 (2.0) is a self-healing elastomeric waterproofing membrane
• MasterSeal HLM 5000 (1.0) is a flexible waterproofing membrane

APPLICATIONS
• Interior and exterior waterproofing
• Basements and crawl spaces
• Roofs and balconies
• Walls and foundations
• Pools and spas
• Sill flashing
• Window and door flashing
• Bathroom and kitchen waterproofing
• Deck waterproofing

INSTALLATION
• Surface must be clean, dry, and free of loose material
• Apply MasterSeal HLM 5000 (2.0) or (1.0) in a uniform thickness
• Allow to cure for 24 hours before exposing to water

ADVANTAGES
• One component, cold-applied
• Self-healing elastomeric waterproofing membrane
• Excellent adhesion to concrete, masonry, metal, wood, and other substrates
• Wide section thicknesses available
• MasterSeal HLM 5000 (2.0) is a self-healing elastomeric waterproofing membrane
• MasterSeal HLM 5000 (1.0) is a flexible waterproofing membrane

FOR TO APPLY MASTERSEAL HLM 5000
If used inside, all concrete back surfaces should be fully sealed to avoid surface water. A light coat of primer is recommended. New concrete should be properly cured at least 14 days. Moisture curing membranes should be non-toxically prepared.

Master Builders
SINCE 1917

DIVISION 8 - DOORS AND WINDOWS

1. QUALITY ASSURANCE

EXTERIOR WINDOW AND DOORS: WINDOWS AND DOORS INSTALLED IN EXTERIOR WALLS SHALL CONFORM TO THE TESTING AND PERFORMANCE REQUIREMENTS OF SECTION 1714.5.1 INSTALLATION.

WINDOW AND DOORS SHALL BE INSTALLED IN ACCORDANCE WITH APPROVED MANUFACTURER'S INSTRUCTIONS. FASTENER SIZE AND SPACING SHALL BE PROVIDED IN SUCH INSTRUCTIONS AND SHALL BE CALCULATED BASED ON MAXIMUM LOADS AND SPACINGS USED IN THE TESTS. EXTERIOR WINDOW AND DOOR ASSEMBLIES, THE DESIGN PRESSURE RATING OF EXTERIOR WINDOWS AND DOORS IN BUILDINGS SHALL BE DETERMINED IN ACCORDANCE WITH SECTION 1714.5.1 OR 1714.5.2, EXCEPT FOR STRUCTURAL WIND LOAD DESIGN PRESSURES FOR WINDOW UNITS SMALLER THAN THE SIZE TESTED IN ACCORDANCE WITH SECTION 1714.5.1 OR 1714.5.2 SHALL BE PERMITTED TO BE HIGHER THAN THE DESIGN VALUE OF THE TESTED UNIT PROVIDED SUCH HIGHER PRESSURES ARE DETERMINED BY ACCEPTED ENGINEERING ANALYSIS. ALL COMPONENTS OF THE SMALL UNIT SHALL BE THE SAME AS THE TESTED UNIT, WHERE SUCH CALULATED DESIGN PRESSURES ARE USED, THEY SHALL BE VALIDATED BY AN ADDITIONAL TEST OF THE WINDOW UNIT HAVING THE HIGHEST ALLOWABLE DESIGN PRESSURE.

EXTERIOR WINDOWS AND GLASS DOORS SHALL BE LABELED AS CONFORMING TO AAMA/NWMA 1011 S.2 OR 1011 S.2NAF'S. THE LABEL SHALL STATE THE NAME OF THE MANUFACTURER, THE APPROVED LABELING AGENCY AND THE PRODUCT DESIGNATION AS SPECIFIED IN AAMA/NWMA 1011 S.2 OR 1011 S.2NAF'S. PRODUCTS TESTED AND LABELED AS CONFORMING TO AAMA/NWMA 1011 S.2 OR 1011 S.2NAF'S SHALL NOT BE SUBJECT TO THE REQUIREMENTS OF SECTIONS 2403.2 AND 2403.3. EXTERIOR WINDOWS AND DOOR ASSEMBLIES NOT PROVIDED FOR IN SECTION 1714.5.1, EXTERIOR WINDOW AND DOOR ASSEMBLIES SHALL BE TESTED IN ACCORDANCE WITH ASTM E330. EXTERIOR WINDOW AND DOOR ASSEMBLIES CONTAINING GLASS SHALL COMPLY WITH SECTION 2403. THE DESIGN PRESSURE FOR TESTING SHALL BE CALCULATED IN ACCORDANCE WITH CHAPTER 16. EACH ASSEMBLY SHALL BE TESTED FOR 10 SECONDS AT A LOAD EQUAL TO 1.5 TIMES THE DESIGN PRESSURE.

2. METAL DOORS AND FRAMES

WORK INCLUDED: FURNISH AND INSTALL METAL DOORS AND DOOR FRAMES AS SHOWN ON THE DRAWINGS AND AS NEEDED FOR A COMPLETE AND PROPER INSTALLATION.

MATERIALS: DOORS AND FRAMES SHALL BE EQUIVALENT TO STEEL CRAFT, LABELED OR NON-LABELED AND SIZE AS INDICATED ON DRAWINGS.

STEEL DOORS SHALL BE FULL FLUSH DESIGN L-18 (18 GAUGE) UNLESS SPECIFIED FOR FINISH HARDWARE AND WITH BAKED ON POWDER PAINT STEEL. FRAMES SHALL BE FURNISHED KNOCKED DOWN, TYPE F-18 (18 GAUGE). MITERED CORNERS SHALL HAVE HEAVY REINFORCEMENTS WITH PROTECTORS FOR SECURING AND INTERLOCKING JAMBS TO HEAD. PROPER REINFORCEMENT AND COATING FOR FINISH HARDWARE FRAMES SHALL BE FULFILLED WITH SUITABLE JAMB AND BASE ANCHORS, OTHER BUMPERS AND PRIME PAINTS.

3. WINDOWS

PROVIDE AND INSTALL STANDARD SOLID CORE FINISH WOOD DOORS. FACE VENEER REFER TO COLOR AND DOOR SCHEDULES FOR LIST OF DOORS TO RECEIVE SCHEDULED FINISHES.

DOORS TO BE FORMED WOOD PARTICLE BOARD, TYPE 1 DENSITY, CLASS 1, DOWNEY BOARD CS236-46, AS MANUFACTURER, BY U.S. PLYWOOD, GENERAL VENEER OF MANHAUSER.

DOORS SHALL BE MANUFACTURED PER M.L. WORK STANDARDS OF THE ARCHITECTURAL WORK INSTITUTE (AWI) FOR PREMIUM GRADE.

EDGE BANDING: PAINTED FINISH MILL OPTION STAINED FINISH MATCH FACE VENEER

CUTOUTS FOR GLAZING OR LOUVERS SHALL HAVE HARDWOOD FRAMES AND STOPS.

ADHESIVES CONFORM TO CS 35 TYPE II, FOR INTERIOR DOORS AND TYPE I FOR EXTERIOR DOORS.

DOORS TO HAVE METAL LOUVERS AS INDICATED ON THE DRAWINGS SHALL BE 24 GAUGE WITH CHEVRON TYPE BLADES WITH FREE AIR 50% TOTAL AREA AND BE PRIME PAINTED.

PRE-FIT DOORS AT FACTORY WITH CLEARANCES OF 1/8" AT EACH VERTICAL EDGE AND AT TOP 1/8" AT BOTTOM, AND 1/8" IN 2" BEVEL AT LOOK EDGE, 1/4" CLEARANCE ABOVE FLOOR WITHOUT THRESHOLD, 1/4" ABOVE FLOOR WITH THRESHOLD.

INSTALL DOORS TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS. FIT DOORS TO FRAMES WITH UNIFORM CLEARANCE AND BEVELS. MACHINE DOORS FOR HARDWARE. IF REQUIRED, REPAIR OR REPLACE DOORS DAMAGED DURING INSTALLATION.

4. FINISH HARDWARE

SECURITY NOTES - SWINGING DOORS:
ALL PIN-TYPE HINGES WHICH ARE ACCESSIBLE FROM OUTSIDE THE SECURED AREA WHEN THE DOOR IS CLOSED SHALL HAVE NON-REMOVABLE HINGE PINS. IN ADDITION, THEY SHALL HAVE 3/4" MINIMUM DIAMETERS STEEL JAMB STUDS WITH 1/2" MINIMUM PROJECTION, UNLESS THE HINGES ARE SHAPED TO PREVENT DOOR REMOVAL IF HINGE PINS ARE REMOVED.

STRIKE PLATES FOR LATCHES AND HOLDING DEVICES FOR PROJECTING DEAD BOLTS IN WOOD CONSTRUCTION SHALL BE SECURED TO THE JAMB AND WALL FRAMING WITH SCREWS NOT LESS THAN 2-1/2" IN LENGTH.

DEAD BOLTS SHALL CONTAIN HARDENED INSERTS.

STRAIGHT DEAD BOLTS SHALL HAVE A MINIMUM THROW OF 1" AND AN EMBEDMENT OF NOT LESS THAN 3/4"

HOCK SHAPED OR EXPANDING LAG DEAD BOLTS SHALL HAVE A MINIMUM THROW OF 1/2"

DIVISION 9 - FINISHES

CYLINDER GUARDS SHALL BE INSTALLED ON ALL CYLINDER LOCKS WHENEVER THE CYLINDER PROJECTS BEYOND THE FACE OF THE DOOR OR IS OTHERWISE ACCESSIBLE TO GRIPPING TOOLS.

HARDWARE NOTES: REFERENCE HARDWARE SCHEDULE FOR SPECIFICATIONS.

KEYING: ALL CYLINDERS SHALL BE REMOVABLE CORE, MASTER KEYED TO INSTA-KEY SYSTEM. REFER DOOR HARDWARE SCHEDULE.

FASTENERS: PROVIDE ALL HARDWARE WITH ALL NECESSARY SCREWS, AND OTHER FASTENERS OF SUITABLE SIZE AND TYPE TO ANCHOR THE HARDWARE IN POSITION FOR LONG LIFE UNDER HARD USE.

FURNISH ITEMS COMPLETE WITH EXPANSION SHIELDS, TOGGLE BOLTS AND OTHER ANCHORS, IN ACCORDANCE WITH THE MATERIAL, TO WHICH THE HARDWARE IS TO BE APPLIED AND THE RECOMMENDATIONS OF THE HARDWARE MANUFACTURER.

FASTENER FINISH SHALL HARMONIZE WITH THE HARDWARE MATERIAL. INSTALL HARDWARE ITEMS IN ACCORDANCE WITH THE SCHEDULE INCLUDED ON THE DRAWINGS, EXCEPT AS SPECIFICALLY REQUIRED TO COMPLY WITH LOCAL CODES AND AS RECOMMENDED BY THE DOOR AND HARDWARE INSTITUTE.

INSTALL HARDWARE IN COMPLIANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. SEAM'S LEVEL, FLUSHNESS, ADJUST AND CHECK OPERATION OF EVERY UNIT. REPLACE UNITS WHICH CANNOT BE ADJUSTED TO OPERATE FREELY AND SMOOTHLY.

COORDINATE WITH OTHER TRADES TO ASSURE PROPER AND ADJUST PROVISION IN THE WORK OF THOSE TRADES FOR INTERFACE WITH THE WORK OF THIS SECTION.

5. INSULATION - GLASS UNIT

TEMPERED GLASS SHALL CONFORM WITH CPSC, ANSI Z97.1, ASTM, FGMA STANDARDS

UNIFORM CODE DATA GLASS: REFERENCE WINDOW SCHEDULE FOR SPECIFICATION.

6. GLAZING

ALL GLAZING SHALL CONFORM TO CONSUMER PRODUCT SAFETY STANDARD 16 CFR. PART 1201.

ALUMINUM STOREFRONT SYSTEM: THE SYSTEM SHALL BE AS NOTED ON THE DRAWINGS AS MANUFACTURED BY: KAWNEER COMPANY, INC., NORTHROP ARCHITECTURAL SYSTEM.

STORE FRONT SHALL BE STRUCTURALLY REINFORCED, EXTRUDED ALUMINUM FRAMING COMPLETE WITH GLASS, NON-STRETCH HIGH SHORE VINYL AND ANCHORAGE ATTACHMENTS AND SHIMS REQUIRED TO SECURE WINDOW WALLS TO BUILDING STRUCTURAL SYSTEM.

FRAMES: SIZES AS SHOWN ON THE DRAWINGS. COMMERCIAL QUALITY EXTRUDED ALUMINUM (ASTM B221), COMPLETE WITH MATCHING PROFILE STOPS TO SUIT FRAMES AND OF ADEQUATE SIZE TO PROVIDE SUFFICIENT BITE ON GLASS, AND DRILLED HOLES, DEFLECTOR PLATES AND INTERNAL FLASHING TO ACCOMMODATE INTERNAL WEEP AND DRAINAGE SYSTEM.

REFER TO WINDOW SCHEDULE FOR ANODIZED ALUMINUM FINISH COLOR.

7. DRIVE-THRU WINDOW

PASS THROUGH WINDOW AT DRIVE-THRU WITH LOCK, PRE-GLAZED WITH ALUMINUM FRAME. SEE WINDOW SCHEDULE ON ELEVATION SHEETS FOR MANUFACTURERS AND DETAILED SPECS.



PANDA RESTAURANT GROUP INC.
1683 Walnut Grove Ave.
Rosemead, California
91770
Telephone: 626.799.9898
Facsimile: 626.372.8288

All ideas, designs, arrangement and plans indicated or represented by this drawing are the property of Panda Express Inc. and were created for use on this specific project. None of these ideas, designs, arrangements or plans may be used by or disclosed to any person, firm, or corporation without the written permission of Panda Express Inc.

REVISIONS:

NO.	DESCRIPTION	DATE
1	ISSUED FOR BID & PERMIT	12-11-18
2	BID SET	01-30-19

ISSUE DATE:

1	ISSUED FOR BID & PERMIT	12-11-18
2	BID SET	01-30-19

ISSUED FOR BID & PERMIT 12-11-18
BID SET 01-30-19

ISSUED FOR BID & PERMIT 12-11-18
BID SET 01-30-19

ISSUED FOR BID & PERMIT 12-11-