Melton Classics

FRP CLASSIC FIBERGLASS ORNAMENTATION INSTALLATION INSTRUCTIONS

GENERAL NOTES:

- 1. FABRICATION OF MATERIAL CANNOT BEGIN UNTIL MELTON CLASSICS RECEIVES A WRITTEN APPROVAL OF REQUIRED COLOR.
- 2. ALL BLOCKING, SUPPORT FRAMING, FASTENERS, FLASHING, AND SEALANTS ARE THE RESPONSIBILITY OF THE INSTALLER UNLESS OTHERWISE NOTED WITHIN THIS SET OF DRAWINGS AND/OR INCLUDED IN ORIGINAL QUOTATION FROM MELTON CLASSICS.
- 3. FRAMING SHOWN IS SUGGESTED ONLY AND MAY NEED TO BE VERIFIED BY A LICENSED P.E. IN THE STATE OF WHICH THE PROJECT IS BEING CONSTRUCTED UNLESS NOTED OTHERWISE IN THE PURCHASE AGREEMENT.
- 4. FIBERGLASS IS 3/16" NOMINAL THICKNESS UNLESS OTHERWISE NOTED. IN ACCORDANCE WITH OUR TRADE OF BEING A HANDMADE PRODUCT, THICKNESS WILL VARY. GRINDING OR SHIMMING OF PARTS MAY BE NECESSARY DURING INSTALLATION TO INSURE A FLAT, STRAIGHT APPEARANCE.
- 5. COLUMN & PILASTER COVERS (WHEN APPLICABLE): ALL COLUMN COVERS SHIPPED IN HALVES TO BE FIELD FINISHED & PAINTED UNLESS OTHERWISE NOTED. ASSEMBLE COLUMN CAPITAL FIRST, THEN WORK YOUR WAY DOWN.
- 6. CORNICE & BALUSTRADES (WHEN APPLICABLE): SOME UNITS WILL REQUIRE FIELD CUTTING TO FINAL SIZE, TYPICALLY SUCH UNITS ARE LABELED AS SUCH AND/OR INDICATED ON "LENGTH REQUIREMENT TABLE".
- 7. DOMES (WHEN APPLICABLE): ALL DOMES SHIPPED IN HALVES OR EQUALLY DIVIDED SECTIONS TO BE FIELD FINISHED & PAINTED UNLESS OTHERWISE NOTED. ASSEMBLE DOMES ACCORDING TO FACTORY-IDENTIFIED NUMBER AND DOME ASSEMBLY INSTRUCTION TO INSURE A CORRECT & TIGHT FIT. COORDINATE ASSEMBLY SEQUENCING WITH OTHER TRADES.
- 8. LIGHTLY SAND ALL FIBERGLASS AREAS TO RECEIVE CAULK, SEALANTS OR PAINT PRIOR TO APPLICATION IN ORDER TO REMOVE ANY WAX BUILD UP OR DIRT.
- 9. THIS SET OF DRAWINGS ARE A DIAGRAMMATIC INTERPRETATION OF ACCOUNTS AND INFORMATION RECEIVED REGARDING THIS PROJECT. DEVIATIONS FROM THE ARCHITECTURAL DRAWINGS, MAY OCCUR, AND THEREFORE THIS SET OF DOCUMENTS SHOULD BE THOROUGHLY REVIEWED BY THE ARCHITECT AND ALL PARTIES WITH A VESTED INTEREST.
- 10. ARCHITECTURAL DRAWINGS MAY NOT REFLECT ACTUAL FIELD VERIFIED CONDITIONS AND SHOULD BE COORDINATED BY THE REVIEWING PROFESSIONALS PRIOR TO FABRICATION RELEASE.

MATERIALS, MOLDS, DELIVERY DATES AND SCHEDULES CANNOT BE PROVIDED UNTIL A WRITTEN APPROVAL RECEIVED BY MELTON CLASSICS AUTHORIZING THE RELEASE FOR FABRICATION.

- 11. INSTALLER / GENERAL CONTRACTOR TO FIELD VERIFY ALL SUBSTRATE CONDITIONS, LOCATIONS, BUILDING DIMENSIONS, ATTACHMENT POINTS AND FRAMING PRIOR TO RELEASE FOR FABRICATION.
- 12. CHANGES OR MODIFICATIONS OF LAYOUTS OR PIECES AS INDICATED BY THIS SET OF DRAWINGS AFTER APPROVALS WILL RESULT IN A CHANGE ORDER AND MAY DELAY FABRICATION TIMES.
- 13. UPON RECEIPT OF MATERIALS, CHECK ALL PARTS AND VERIFY QUANTITIES AGAINST THE PACKING LIST INCLUDED. NOTIFY MELTON CLASSICS IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
- 14. UPON RECEIPT OF PRODUCT, STORE IN A CLEAN, DRY AREA FREE FROM ANY POTENTIAL DAMAGE. DO NOT STACK STORED PARTS OR STORE IN HIGH TEMPERATURE AREAS AS SURFACE DAMAGE AND WARPING MAY OCCUR.

GENERAL DISCLAIMER:

FRAMING, BACKING MATERIAL, SHIMS, REINFORCEMENTS, CAULKING, SEALERS, ADHESIVES, CLEANING MATERIALS, APPLICATORS, FASTENERS, CLIPS, FLASHING, OR ANY OTHER INSTALLATION MATERIALS ARE NOT INCLUDED, QUOTED, OR PROVIDED BY MELTON CLASSICS UNLESS OTHERWISE NOTED ON THESE SHOP DRAWINGS OR IN ORIGINAL JOB QUOTATION. ENGINEERING IS NOT INCLUDED. SHOULD ENGINEERING CALCULATIONS BE REQUIRED FOR ANY SUPPLIED MATERIAL, MELTON CLASSICS WILL PROVIDE SUCH FOR AN ADDITIONAL FEE WHICH WILL BE DETERMINED BASED UPON THE SCOPE OF THE JOB AND THE LOCATION OF THE PROJECT. MELTON CLASSICS DOES NOT PROVIDE ANY ON-SITE SERVICES. IF IT IS NECESSARY FOR MELTON CLASSICS TO MAKE SITE VISITS FOR SUPERVISORY OR ADMINISTRATIVE PURPOSES THE COST OF TRAVEL, TIME, AND ALL OTHER RELATED EXPENSES WILL BE THE RESPONSIBILITY OF THE CUSTOMER. IT IS THE RESPONSIBILITY OF THE CUSTOMER TO INSPECT EVERY PART SUPPLIED BY MELTON CLASSICS UPON ARRIVAL AT THE JOB SITE PRIOR TO ACCEPTING MATERIAL. MELTON CLASSICS GUARANTEES THAT IT'S MATERIAL MEETS STANDARD SPECIFICATIONS AND PERFORMANCE CHARACTERISTICS AND IS FREE OF WORKMANSHIP DEFECTS UPON SHIPPING. MELTON CLASSICS WILL REPLACE OR REPAIR ANY MATERIAL WHICH IS DEEMED DEFECTIVE IN A TIMELY MANOR FOLLOWING NOTIFICATION UPON SITE DELIVERY AND INSPECTION. ANY CRACKING, CHIPPING, SCRATCHING, WARPING, OR STAINING IS NOT THE RESPONSIBILITY OF MELTON CLASSICS ONCE THE MATERIAL HAS BEEN UNLOADED, ACCEPTED, STORED, OR INSTALLED.

WATER TIGHTNESS:

MELTON CLASSICS SUPPLIED MATERIALS AND PRODUCTS ARE INTENDED TO BE INSTALLED ON FINISHED OR SHEATHED WATERTIGHT BUILDING SURFACES. ORNAMENTAL FIBERGLASS IS NOT INTENDED TO BE THE PRIMARY WATER BARRIER FOR ANY BUILDING. WATER TIGHTNESS IS A FUNCTION OF THE INSTALLATION AND THE SUBSTRATE TO WHICH THE FIBERGLASS MATERIAL IS

BEING ATTACHED. MELTON CLASSICS SUPPLIED MATERIAL IS STRICTLY FOR ORNAMENTAL PURPOSES AND THE SUPPLIER IS NOT RESPONSIBLE FOR ANY OTHER USES OF IT'S MATERIAL. ORNAMENTAL FIBERGLASS APPLICATIONS, ALTHOUGH DESIGNED TO SHED WATER ARE NOT INSULATED AND MAY CAUSE CONDENSATION WITHIN THE VOID BEHIND THE SHAPE. IT IS REQUIRED THAT NECESSARY WEEP SPACING AND MOISTURE BARRIERS BE IN PLACE PRIOR TO OR CREATED DURING THE INSTALLATION OF MELTON CLASSICS SUPPLIED MATERIAL. MELTON CLASSICS DOES NOT WARRANT WATERTIGHT FACTORY ASSEMBLED OR FIELD ASSEMBLED JOINT. THE INTEGRITY OF FACTORY ASSEMBLED JOINTS HAS THE POTENTIAL TO BE JEOPARDIZED DURING TRANSPORT AND INSTALLATION. THEREFORE, MELTON CLASSICS RECOMMENDS A FINAL APPLICATION OF SEALANT AFTER INSTALLATION OF MELTON CLASSICS SUPPLIED COMPONENTS.

PROJECT DRAWING SUBMITTAL:

MELTON CLASSICS CORPORATION HAS ITS OWN ARCHITECTURAL DESIGN DEPARTMENT AND MOLDING FACILITY TO PRODUCE A LEVEL OF DETAILING IN ACCORDANCE WITH THE CUSTOMER'S DESIGN INTENTIONS. SPECIFIC DETAILS AND DRAWINGS ARE NECESSARY FOR ACCURATE PRODUCTION OF MELTON CLASSICS SUPPLIED MATERIAL WHICH IS THE PURPOSE OF THIS SET OF SHOP DRAWINGS. THESE DRAWINGS ARE BEING PROVIDED FOR CAREFUL REVIEW AND FINAL APPROVAL FOR FIBERGLASS COMPONENTS WHICH MELTON CLASSICS WILL BE PRODUCING FOR USE ON YOUR PROJECT. IT IS IMPERATIVE THAT EACH DIMENSION AND SHAPE DEPICTED WITHIN THESE DRAWINGS BE REVIEWED.

WHEN SHOP DRAWINGS ARE RETURNED "APPROVED" BUT ARE NOTED "SUBJECT TO FIELD VERIFICATION OF FINAL DIMENSIONS" OR "V.I.F." THE FABRICATION OF MOLDS CANNOT BEGIN AND CONSEQUENTLY PRODUCTION SCHEDULES ARE DISRUPTED. THEREFORE, NO PRODUCTION OR DELIVERY SCHEDULES WILL BE ISSUED UNTIL ALL FINAL RELEVANT INFORMATION IS SUBMITTED AND NOTED ON APPROVED SHOP DRAWINGS WITHOUT EXCEPTION OR NEED FOR FURTHER NOTIFICATION.

FOLLOWING DRAWING APPROVAL, SHOULD CHANGES OCCUR THAT EFFECT TOOLING FABRICATION, JOB COST, OR MOLD CHANGES OR INTERRUPTS PRODUCTION IN ANY FASHION, IT IS UNDERSTOOD THAT ANY PRODUCTION OR DELIVERY SCHEDULE PREVIOUSLY UPON WILL BE IMPACTED, AND WILL RESULT IN AN OPEN SCHEDULE UNTIL ANY CHANGE ORDERS INITIATED FROM SUCH CHANGES ARE APPROVED IN WRITING. AFTER RECEIPT OF SUCH ACKNOWLEDGEMENTS A NEW PRODUCTION AND DELIVERY SCHEDULE WILL BE PROVIDED

OCCASIONALLY AN APPROVED PROFILE MAY NEED TO BE MODIFIED DURING THE TOOLING PROCESS AS NECESSARY TO FACILITATE THE RELEASE OF THE PART FROM THE MOLD. THESE MODIFICATIONS WILL BE MINOR AND WILL NOT AFFECT THE LOOK OR OVERALL DIMENSIONS OF THE PROFILE.

CORNICE INSTALLATION GENERAL NOTES:

1. TO AVOID DEFLECTION/OIL CANNING: USE ADHESIVE/SHIMS AS REQUIRED. AVOID FACE FASTENERS WHENEVER POSSIBLE WHERE FINISH CANNOT BE RESTORED TO ORIGINAL.

- 2. WHEN FASTENERS ARE REQUIRED, LOCATE IN CONCEALED LOCATIONS WHENEVER POSSIBLE. PREDRILL SCREW HOLES SLIGHTLY OVERSIZED TO ALLOW FOR EXPANSION AND CONTRACTION. ANY EXPOSED FASTENERS, FILL AND SEAL TO MATCH AS REQUIRED (SEE PATCH KIT INSTRUCTIONS).
- 3. MANUFACTURER RECOMMENDS FLASHING TO ENTIRELY COVER ALL UPWARD FACING CORNICE.

GEL-COAT PATCH KIT INSTRUCTIONS TO SEAL COUNTERSUNK FINISH HEAD SCREWS:

"PATCH KIT" MATERIAL IS SIMILAR TO AND WORKS LIKE A COLOR CODED "BONDO" FILLER AND RECOMMENDED TO BE USED AT 77 DEGREES. USERS MUST WEAR APPROPRIATE GLOVES AND EYE PROTECTION - ESPECIALLY WHILE MIXING

STEPS FOR USING GELCOAT PATCH MATERIAL:

- 1. TYPICAL MIX RATIO IS 100 PARTS OF GEL-COAT MIX TO 2 PARTS CATALYST (MEKP) AT 77 DEGREES. MIXING MUST BE THOROUGH OR GEL-COAT WILL NOT CURE PROPERLY.
- 2. WORKING TIME IS APPROXIMATELY 15 MINUTES AT 77 DEGREES. WE RECOMMEND MIXING SMALLER PORTIONS, ENOUGH TO USE WITHIN 15 MINUTES. A TABLESPOON OF PATCH MIX ON A PIECE OF SCRAP CARDBOARD, WITH AN INDENTION MADE IN THE MATERIAL TO CONTAIN A FEW DROPS OF MEKP CATALYST IS A COMMON EFFECTIVE METHOD.
- 3. DO NOT USE MORE THAN THE RECOMMENDED AMOUNT OF CATALYST, AS THIS PRODUCT IS EXTREMELY FLAMMABLE. IF SMOKE STARTS TO APPEAR FROM MIXTURE, THIS MEANS IT HAS BEEN MIXED TOO HOT, SIMPLY IMMERSE IN WATER
- 4. FOR CHIPPED OR DAMAGED AREAS TO BE FILLED, LIGHTLY SAND THE DAMAGED SURFACE.
- 5. AFTER SANDING, IT IS IMPORTANT TO CLEAN THE AREA THOROUGHLY OF DUST AND DEBRIS BY WIPING THE SURFACE WITH ACETONE TO ENSURE PROPER ADHESION OF PATCH MATERIAL.
- 6. APPLY SPARINGLY, DO NOT OVER-APPLY AND CLEAR WITH A BLADE AS ONE WOULD WITH GWB SPACKLE. IF THE PATCH MIX IS OVER-APPLIED, WIPE CLEAN WITH A DRY RAG OR A MODEST AMOUNT OF ACETONE ON A RAG. PATCH MIX CANNOT BE WIPED AWAY ONCE HARDENED. FOR LARGER PATCHES, MULTIPLE APPLICATIONS MAY BE REQUIRED TO FILL VOIDS.
- 7. CURING TIME WILL VARY UPON TEMPERATURE AND AMOUNT OF CATALYST ADDED. ADDITIONAL CATALYST (UP TO 3%) FOR COLDER TEMPERATURES WILL ACCELERATE CURE AND LOWER CATALYST (AT 1%) FOR HIGHER TEMPERATURES WILL LENGTHEN CURE TIMES. CURED MIXTURE WILL SHRINK. ONCE CURED, MIX CAN BE SANDED OR ADDITIONAL MIX ADDED TO FILL VOIDS.

NOTE: PATCH MIX IS NOT INTENDED TO FILL SEAMS. USE A PROPER COLOR-MATCHED CAULK, APPLIED WITH TAPED EDGES AT SEAMS.

INSTRUCTIONS FOR INSTALLATION OF MELTON CLASSICS FIBERGLASS COLUMN COVERS:

- 1. UPON RECEIVING YOUR SHIPMENT OF COLUMN COVERS, PLEASE INSPECT THE INSIDE OF EACH OF THE COVERS WHICH HAVE BEEN FACTORY NUMBERED AND IDENTIFIED TO INSURE A CORRECT FIT TO EACH OF THE MATCHING COLUMN COVERS.
- 2. PROVIDE AND INSTALL BLOCKING FOR ATTACHMENT OF THE CAP. MATERIALS WHICH YOU WILL USE WILL BE EITHER METAL OR FIRE-TREATED WOOD. THESE MATERIALS SHOULD BE PERMANENTLY ATTACHED TO THE BONDING STRUCTURE AND MATCH THE PROFILE OF THE COLUMN CAPITAL.
- 3. PROVIDE SIMILAR BLOCKING FOR THE BASE OF THE COLUMN. FOLLOW SAME INSTRUCTIONS AS OUTLINED IN ITEM #2.
- 4. PRE-FIT BOTH HALVES OF THE COLUMN BLOCKING TO INSURE PROPER FIT.
- 5. PERMANENTLY ATTACH ONE-HALF OF THE COLUMN TO THE BLOCKING (BOTH CAP AND BOTTOM SECTIONS). YOU MAY ALSO ATTACH THE MIDSECTION AND OTHER SECTIONS OF THE COVER TO ADDITIONAL BLOCKING IF YOU PREFER.
- 6. APPLY A HIGH-QUALITY CONSTRUCTION ADHESIVE (RECOMMENDED: WELD-ON 31 STRUCTURAL ADHESIVE; OR LORD 7545-F URETHANE ADHESIVE) TO THE LAP JOINT OR BUTT JOINT.
- 7. SET THE SECOND COLUMN HALF AGAINST THE ERECTED FIRST COLUMN HALF AND SECURE WITH BANDING STRAPS IN A MINIMUM OF 2' C/C.
- 8. DRILL AND COUNTERSINK HOLES ALONG THE LAP JOINTS SIX (6) INCHES ON CENTER AND ATTACH ONE-EIGHTH (1/8) INCH STAINLESS STEEL POP RIVETS THROUGH THE FIBERGLASS, LAPPING JOINT SECTIONS FOR PERMANENT BOND.
- 9. SAND THE COLUMNS APPROXIMATELY THREE (3) INCHES ON EACH SIDE OF THE JOINT, USING GRADE #200 SANDPAPER.
- 10. APPLY MASKING TAPE VERTICALLY ON THE COLUMN THREE (3) INCHES ON EACH SIDE OF THE JOINT AND APPLY A THIN LAYER OF POLYESTER BODY FILLER (AUTOMOTIVE TYPE BODY FILLER) OVER THE JOINTS AND RIVETS.
- 11. REMOVE THE TAPE AND FEATHER OUT THE BODY FILLER SMOOTH WITH THE COLUMN.
- 12. SAND AND PRIME THE BODY FILLER SECTION OF THE COLUMN. PLEASE BE SURE THAT THE COLUMN COVERS ARE LIGHTLY SANDED TO AVOID THE WAX AND GREASE BUILDUP BEFORE YOUR FINAL COAT OR PAINT. YOU ARE NOW READY FOR THE FINAL FINISHING COAT.
- 13. MELTON CLASSICS RECOMMENDS THAT A URETHANE BASE PAINT BE USED FOR BEST RESULTS.

PAINTS SUCH AS ACRYLIC POLYURETHANE PLASTIC FINISHES ARE HIGHLY RECOMMENDED.

MINOR SURFACE REPAIR:

1. FOLLOW THIS PROCEDURE FOR REPAIRING SMALL DAMAGED AREAS WHICH DO NOT PENETRATE THE LAMINATE COMPLETELY.

- 2. PREPARE THE SURFACE TO BE REPAIRED USING A ROUTER, DRILL WITH BURR BIT ATTACHMENT OR COURSE SANDPAPER.
- 3. CLEAN AREA TO BE PATCHED USING A SOLVENT SUCH AS ETHYL ACETATE OR METHYL ETHYL KETONE.
- 4. MEASURE OUT 50 GRAMS, ML, OR CC OF GEL-COAT INTO A SMALL CONTAINER. ADD 1 GRAM, ML, OR CC (APPROX. 2% OF TOTAL MIX) 0F METHYL ETHYL KETONE, M.E.K. (CATALYST) AND THOROUGHLY MIX. GEL TIME WILL VARY DEPENDING ON TEMPERATURE AND HUMIDITY.
- 5. APPLY CATALYZED GEL-COAT TO THE DAMAGED AREA USING A FLEXIBLE KNIFE, SIDE OF STRAIGHT-EDGE RAZOR, OR SQUEEGEE. LEAVE A SLIGHTLY ROUNDED AMOUNT BEYOND THE DAMAGED AREA TO ALLOW FOR SHRINKAGE. USE A PIN TO POP ANY AIR BUBBLES.
- 6. SMOOTH CELLOPHANE OR WAXED PAPER OVER REPAIRED AREA WHILE THE PATCH MATERIAL CURES.
- 7. THE REPAIRED AREA SHOULD CURE THOROUGHLY PRIOR TO UNCOVERING. CURE TIME APPROXIMATELY 2-3 HOURS.
- 8. SAND THE PATCHED AREA WITH 220 GRIT WET OR DRY SANDPAPER. FOLLOW WITH 320 OR 400 GRIT, THEN FINISH WITH 600 GRIT.
- 9. FINISH AREA BY BUFFING WITH RUBBING COMPOUND UNTIL AREA BLENDS INTO AND MATCHES ADJOINING SMOOTH SURFACES

NOTE: IF PATCH SHRINKS TO WHERE IT IS NO LONGER LEVEL WITH THE ADJOINING SURFACE, IT MAY BE NECESSARY TO REPEAT THE PROCESS.

STORAGE OF FIBERGLASS COMPONENTS:

SEVERE DAMAGE CAN OCCUR FROM IMPROPER STORAGE, HANDLING, FINISHING AND INSTALLATION OF MELTON CLASSICS SUPPLIED MATERIAL. THE FOLLOWING GUIDELINES CAN HELP MAINTAIN THE INTEGRITY OF THE FIBERGLASS COMPONENTS.

- 1. TEMPERATURE AND HUMIDITY CONTROLLED BUILDINGS PROVIDE THE BEST STORAGE. UNINSTALLED FIBERGLASS COMPONENTS SHOULD NOT BE EXPOSED TO EXTREME HEAT AND/OR MOISTURE AS PROLONGED EXPOSURE MAY CAUSE DAMAGE.
- 2. FIBERGLASS COMPONENTS SHOULD BE STORED STANDING OR IN AN UPRIGHT STACK NOT TO EXCEED 5-10 PARTS DEEP, IF LEANING.
- 3. CAREFULLY HANDLE FIBERGLASS COMPONENTS WITH CLEAN, DRY HANDS AS STAINING CAN RESULT FROM DIRT AND GREASE.
- 4. IF STORED IN AN ACTIVE WORKING ENVIRONMENT, COVER MATERIAL TO PROTECT FROM AIRBORNE RESIDUE OR FALLING DEBRIS.
- 5. DRAGGING COMPONENTS ACROSS ONE ANOTHER OR ACROSS ABRASIVE SURFACES WILL RESULT IN DAMAGE, LIFT AND CARRY TO MOVE.

MATERIALS AND FABRICATION:

- 1. GLASS CLOTH, MATT AND "CHOP" SHALL BE EQUAL TO THE PRODUCTS OF PPG-OWENS CORNING.
- 2. WHEN REQUIRED, POLYESTER RESINS SHALL BE CLASS A. THE RESIN WILL BE A FLAME RETARDANT, PROMOTED THIXOTROPIC POLYESTER RESIN DESIGNED FOR USE IN HAND LAY-UP AND SPRAY-UP PROCESSES THIS RESIN IS SPECIFICALLY FORMULATED FOR USE IN APPLICATIONS THAT REQUIRE AN ASTM E-84, CLASS 1 FLAME SPREAD RATING, AN ASTM E-84 FLAME SPREAD RATING OF LESS THAN 25.
- 3. FIBERGLASS REINFORCED POLYESTER COMPONENTS SHALL BE MANUFACTURED USING THE SPECIFIED RESINS, REINFORCED WITH THE CHOPPED GLASS FIBERS. ALL EXPOSED SURFACES SHALL BE FINISHED WITH COLORED GEL-COAT WITH U-V INHIBITOR.
- 4. INTERNAL METAL REINFORCEMENT ANCHORAGE CLIPS, BRACKETS, FASTENERS AND STAINLESS STEEL HARDWARE TO BE SUPPLIED BY CONTRACTOR OR INSTALLER.
- 5. FINAL RATIO OF MATERIALS, OTHER THAN FILLER SHALL BE APPROXIMATELY 25% FIBER, 75% RESIN FOR BODY OF COMPONENTS.
- 6. GEL-COAT THICKNESS SHALL BE .015" TO .025" OR 18 TO 22 MILS.
- 7. JOINTS IN COMPONENTS SHALL BE MATCHED AT THE FACTORY AND NUMBERED IF NECESSARY FOR FIELD INSTALLATION. COMPONENTS SHALL BE FABRICATED TO MINIMIZE EXPOSED FASTENERS.
- 8. PARTS SHALL HAVE A SMOOTH GEL-COAT FINISH MATCHING THAT OF THE FRP SAMPLE PROVIDED TO ARCHITECT AND/OR OWNER.

FRP SYSTEM PERFORMANCE:

- 1. THE FRP SHAPES WHEN INSTALLED SHALL BE CAPABLE OF WITH STANDING POSITIVE AND NEGATIVE WIND PRESSURE WITHOUT STRUCTURAL FAILURE, CRACKING, PERMANENT DISTORTION OR DISPLACEMENT.
- 2. ALLOWABLE DESIGN STRESSES AND RESISTANCE SHALL BE CONSERVATIVELY SELECTED BY THE ENGINEER.
- 3. THERMAL MOVEMENT: DESIGN, FABRICATE AND INSTALL COMPONENT PARTS TO PROVIDE FOR EXPANSION AND CONTRACTION FOR AMBIENT TEMPERATURES.
- 4. THE FIBERGLASS REINFORCED POLYESTER PLASTIC COMPONENTS SHALL BE ENGINEERED, FABRICATED AND ERECTED TO CONFORM TO THE SPECIFICATIONS AND APPLICABLE REQUIREMENTS AS SPECIFIED BY LOCAL CODES TO FIT THE BUILDING STRUCTURE AND TO CONFORM TO THE ARCHITECT'S VISUAL DESIGN CRITERIA.

DOME ASSEMBLY INSTRUCTIONS:

- 1. EACH SECTION TYPICALLY IS PRE-DRILLED, AND PRE-FITTED AT THE FACTORY. IN SOME INSTANCES WHEN SECTIONS ARE FACTORY NUMBERED, THEY SHOULD BE INSTALLED IN SEQUENCE OF SUCH NUMBERS (SPRAY PAINTED NUMBER WITH AN ARROW SHOWING DIRECTION).
- 2. SOME RE-DRILLING OR MANIPULATION OF SECTIONS MAY BE REQUIRED IN THE FIELD SO THAT SECTIONS MAY ALIGN PROPERLY.
- 3. APPLY GASKETING TO BOLTING FLANGES AS REQUIRED (SEALANT TYPICALLY IS APPLIED AFTER DOME IS LIFTED INTO PLACE).
- 4. SET PIECES UP ON A FLAT LEVEL SURFACE FOR PROPER ALIGNMENT OF DOME SECTIONS. FIBERGLASS TENDS TO FLEX, THEREFORE WHEN ASSEMBLED ON UNEVEN SURFACES, ALIGNMENT ISSUES MAY RESULT. IDEALLY THE DOME SHOULD BE ASSEMBLED ON THE GROUND AND LIFTED INTO PLACE AFTER ASSEMBLY.
- 5. INSTALL BOLTS, WASHERS, AND LOCK WASHERS IN THE SEQUENCE OF INSTALLATION. IT IS HIGHLY RECOMMENDED TO ONLY INSTALL A FEW BOLTS PER SECTION, ENOUGH TO ALIGN THE JOINTS (TYPICALLY AT THE TOP, MIDDLE, AND BOTTOM). LEAVE THE BOLTS LOOSE (HAND TIGHTEN ONLY). YOU MAY NEED TO LOOSEN AND RE-TIGHTEN THE INITIAL BOLTS UNTIL JOINT ALIGNMENT IS ACCEPTABLE.
- 6. WHEN COMPLETE DOME IS LOOSELY ASSEMBLED AND IN THE REQUIRED SHAPE AND FOOTPRINT; THE REMAINING BOLTS MAY BE INSTALLED, AND ALL BOLTS TIGHTENED.
- 7. THERE ARE MULTIPLE METHODS TO LIFT DOMES INTO PLACE. TYPICALLY, DOMES ARE LIFTED FROM THE CENTER HOLE, HOWEVER LARGER DOMES MAY NEED ADDITIONAL STRAPPING AROUND THE PERIMETER.
- 8. FINAL SEALANT APPLICATION TO JOINTS MAY BE REQUIRED AFTER THE DOME IS LIFTED INTO PLACE.
- 9. IF YOUR INSTALLATION IS REQUIRED TO BE WATER-TIGHT, ADDITIONAL STEPS MAY BE REQUIRED. AN 'ICE AND WATER SHIELD' TYPE OF MEMBRANE MAY BE APPLIED OVER FRP FLANGES AND BOLTS.
- 10. IF YOUR INSTALLATION REQUIRES INSULATION, CLOSED CELL FOAM MAY BE SPRAYED ONTO BACKSIDE OF DOME AFTER INSTALLATION.

AVERAGE PHYSICAL PROPERTIES OF FRP:

PROPERTY	VALUE	TEST METHOD
TENSILE STRENGTH	18,000	ASTM D-638
FLEXURAL STRENGTH	30,000	ASTM D-790
FLEXURAL MODULUS	1.3	ASTM D-790
COMPRESSIVE STRENGTH	18,000	ASTM D-695

BEARING STRENGTH	10,000	ASTM D-638
THERMAL EXPANSION	10 x 10.6	(In/In/FO)
BARCOL HARDNESS	50-55	ASTM
GLASS CONTENT	29.8	ASTM

NOTE: ALL BLOCKING, SUPPORT FRAMING, FASTENERS, FLASHING & SEALANTS ARE THE RESPONSIBILITY OF THE INSTALLER, UNLESS OTHERWISE NOTED. FRAMING SHOWN IS SUGGESTED ONLY, MAY VARY FOR INSTALLATION OR MAY BE MODIFIED BY THE INSTALLER TO FIT BUILDING CONDITIONS & MAY NEED TO BE VERIFIED BY A LICENSED P.E. IN THE STATE WHICH THE PROJECT IS BEING CONSTRUCTED.

<u>DRAWING NOTES:</u> SHOP DRAWINGS DEVELOPED BASED UPON THE QUANTITIES AS PRESENTED TO MELTON CLASSICS.

<u>CUSTOM SHAPE NOTES:</u> DUE TO THE CUSTOM NATURE OF OUR MANUFACTURING PROCESSES & PROCEDURES, MELTON CLASSICS RESERVES THE RIGHT (INCLUDING BUT NOT LIMITED TO) MAKING PROFILE CHANGES AND OTHER MINOR ADJUSTMENTS TO MAKE PRODUCTS MORE CONDUCIVE TO THE MANUFACTURING PROCESS.

<u>FASTENER NOTE:</u> PREDRILL SCREW HOLES SLIGHTLY OVERSIZED TO ALLOW FOR EXPANSION AND CONTRACTION. ANY EXPOSED FASTENERS, FILL AND SEAL TO MATCH AS REQUIRED.

<u>JOINT NOTE:</u> ALL JOINTS TO BE SEALED WITH COLOR MATCHED LOW MODULUS SEALANT (ULTRA-LOW MODULUS SEALANT, SIMILAR TO SIKASIL WS-290 FPS) - BY OTHERS.