

Bid Addendum No. 3

Date: December 11, 2023

Project : **DNR- 230014.02**

FY23-24 Lake Loramie State Park – New Welcome Center

To All Bidders: This Addendum updates the original Drawings and Project Manual (and shall become part of the Contract Documents). **NOTE: The Bid Document Project Manual (and associated Specification Sections) are dated August 30, 2023. The Civil, Architectural, Plumbing, HVAC and Electrical Drawings (Bid Documents) are typically dated November 08, 2023. The Bid Document Structural Drawings are dated August 30, 2023.**

See the end of this document for listing of revised Specifications or Drawings issued as part of this Addendum. Revised Drawings and Specifications will include designation within the typical REVISION BLOCK within the typical drawing title block / specification header notating Addendum # and associated issuance date.

This Addendum contains **03** total pages, including this cover sheet.

A) General:

- 1) **NOTICE OF BID OPENING DATE EXTENSION:** Due to the Thanksgiving Holiday and Ohio Deer Gun Season, the Bid Opening Date has been **extended from December 8, 2023 to December 15, 2023 at 2:00pm EST**. All other bidding provisions included within the Project Manual apply and remain unchanged. This was noted in Bid Addendum 1, and date will be adjusted in Bid Express along with Bid Addendum 2. This final Bid Addendum was issued prior to new deadline of 2pm on Tuesday December 12, 2023.
- 2) Partial Permit Approval has been secured from Commerce. EPA PTI in hand, Flood Permit in hand. Work may proceed once NTP is issued to the General Contractor.

B) Substitutions:

- 1) Substitution requests have been received and evaluated. Substitution requests that are accepted are issued as part of this Addendum and may be used by bidders.
- 2) REVISE Section 10 28 00 – Toilet Accessories, Subparagraph 2.07.A.6 to ADD the following acceptable equal product and manufacturer: “Babymedi by Saniflow, Model #CP0016HCS-ASTM”. See attached support information.
- 3) REVISE Section 07 41 13.16 – Standing-Seam Metal Roof Panels, Subparagraph 2.2.B.1. to ADD the following acceptable equal products and manufacturers: “e.DMI (Dimensional Metals, Inc.), SL2018” and “f. Metal Panel Systems, MP200 Panel at 18””. CLARIFICATION to Subparagraph 2.2.B.5: “Panel Coverage: 18 inches (457mm) **with flat / smooth panel between seams.**” See attached support information from the two (2) metal roofing manufacturers.

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C) RFI replies and miscellaneous Drawing / Specification revisions:

ADD3.1: We understand that the building is in the floodplain and that balanced cut and fill will be required to meet the flood permit from Shelby County. Can you provide any information about the quality of soil we should expect, and what we can do with any excess soil?

A- Please refer to Section 00 31 32 – GEOTECHNICAL DATA for the Geotechnical Report that includes boring information at building area, paving areas, and utility locations. Design addresses these conditions and follows the recommendations of the report. Design team anticipates reuse of most soil on site for regrading with around 12 trucks of soil taken outside of the floodplain based on new material coming in and maintaining cut/ fill balance. Excess non-organic clean soil may be taken to nearby DMRA site as coordinated with DNR Parks. Excess organic topsoil may also be coordinated with Parks for possible future use in planned gardens in same vicinity. If expected quantities are exceeded DNR may not be able to accept all excess, but at this stage we forecast limited soil needing to be trucked completely out of the park, and bids should reflect this.

ADD3.2: Detail 2 on E2-0 says to coordinate with AES/DP&L on installation of a new utility pole mounted transformer and direct buried secondary conductor. Reference riser on sheet E4-0. One line diagram on E4-0 detail 1 shows the utility coming in a 4" conduit with 3-350's and a #4 ground. Please confirm whether direct bury or in conduit, etc.

A- Provide direct bury of conductor as defined in Revised Detail 1/A-4-0 on Drawing E-4-0, attached.

ADD3.3: Regarding Drawing C4 – SITE PLAN and C5 – PROFILES, please confirm if the Force Main that is being lowered is 3" as shown exiting the pump station to the west on Drawing C4. It appears as though two force mains come together just to the west of the wet well and I want to be sure that the main doesn't upsize to 6" at that junction.

A- CLARIFICATION to Drawing C4 and C5: Based on best information available provided by Shelby County Sanitary Sewer District, bid a 6" force main line being dropped at location indicated on Drawing C5. Surveyor identified a 3" line at existing pump station, but line is believed to be 6" where it will cross the new gravity sanitary line.

ADD3.4: REVISE Section 08 71 00 – Door Hardware, attached, as indicated. Primary revisions affect the aluminum storefront entrances and associated hardware with accessible door operators and push-button actuators.

End of Addendum #3

D) ATTACHMENTS: See Page 3 of 3 for list of attachments.

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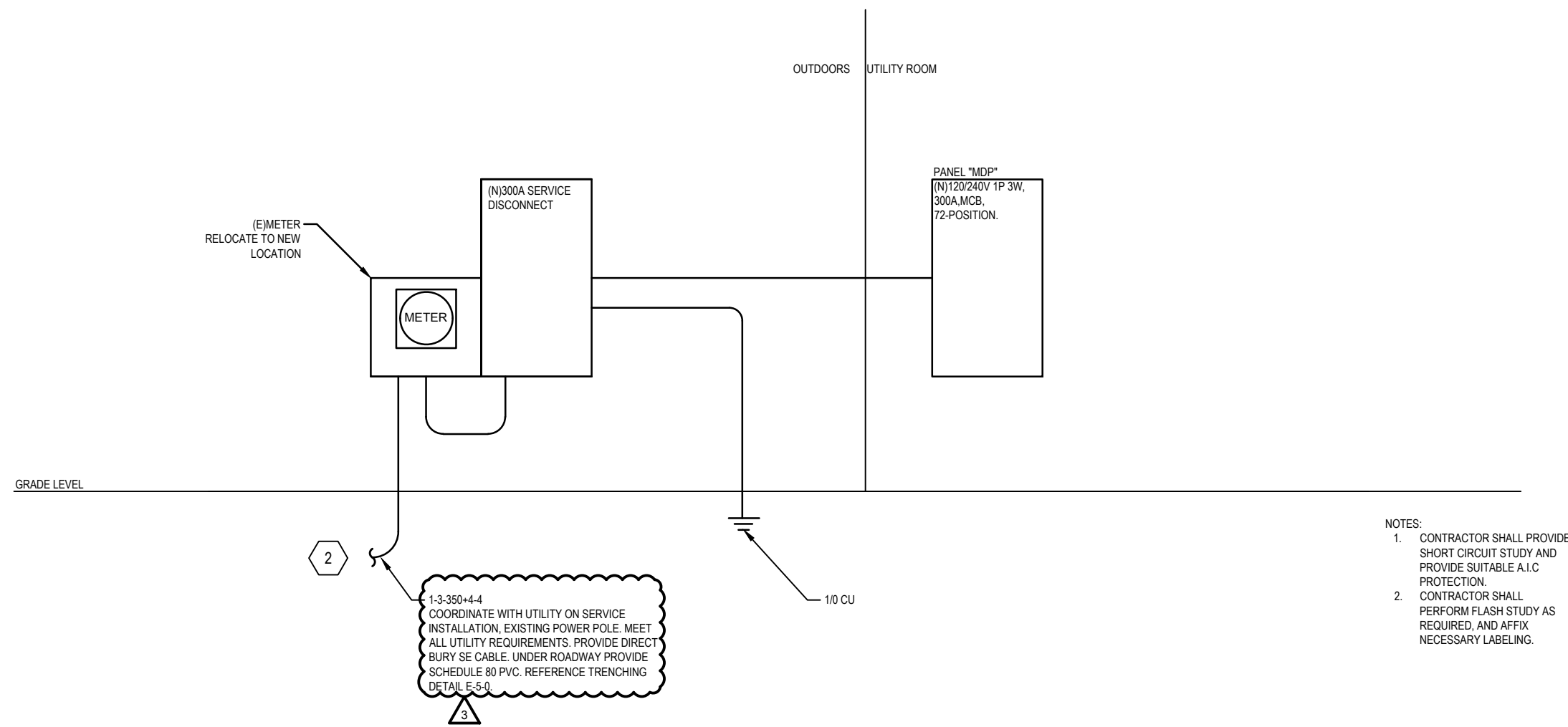
- 1) Accepted Substitutions:
 - a. Standing Seam Metal Roof Panels – DMI Data
 - b. Standing Seam Metal Roof Panels – Metal Panel Systems Data
 - c. Toilet Accessories – Baby Changing Table from Babymedi
- 2) Revised Specifications:
Section 08 71 00 – Door Hardware
- 3) Revised Drawings:
E-4-0 – Electrical Schedules & Riser Diagram

Prepared by:

Joseph V. Pax, AIA

Feinknopf Macioce Schappa Architects

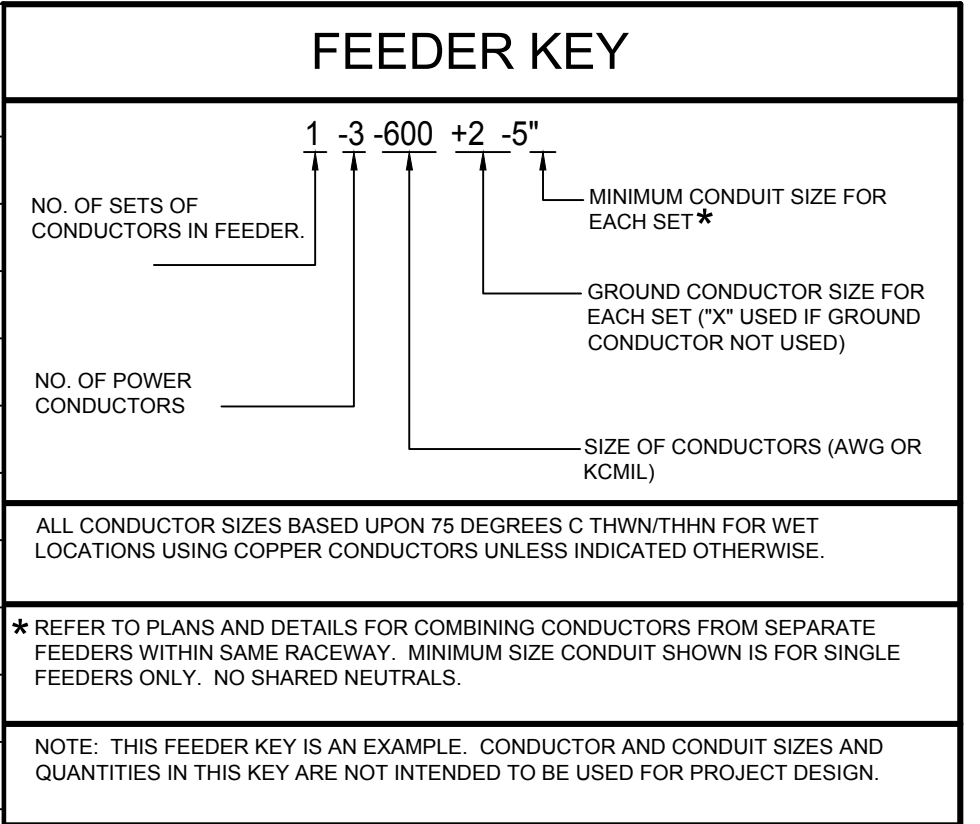
	LIGHTING FIXTURE SCHEDULE WITH EQUIVALENT ALTERNATES			
TAG	DESCRIPTION	W	MANUFACTURER	MODEL#
C1 C1/EM	4'-0" LED UTILITY WRAP, DAMP LOCATION LISTED. 4000K. SUSPENDED OR PENDANT /EM WITH 10W EMERGENCY BATTERY (MECHANICAL ROOM)	30	LITETRONICS	SFS4/AB10/EBAM/SFAM02
		31.1	DAY BRIGHT	FSSEZ-4-40L-840-UNV-DIM/EMLED
		30	METALUX	4SNX-SL3-LW-UNV-CC83-CD1-U/AYC-CHAIN/SET-U / EL1XW
C3	2X2 LED ACT GRID LAY-IN PANEL (BACK OF HOUSE-FOOD PREP)	25	LITETRONICS	PT2
		25	DAY-BRITE	2SBP3550L8CS-4-UNV-DIM
		25	METALUX	22CGTS-L3C3
P1	PENDANT TYPE, 8-10", AIRCRAFT CABLE SUSPENDED, LED (LOBBY & CAMP STORE)	30	CONTECH	CGL84030K12AFC-P
		30	BARNLIGHT	BLE-D-BRN10-X-X-X-NA-LED16-3500K-FL
		30	TBD	TBD
S1 S1/EM	4'-0" LED WRAP SURFACE MOUNTED. WET LOCATION LISTED. 4000K. SURFACE /EM WITH 10W EMERGENCY BATTERY (GYP CEILING, E. HALLWAY)	30	LITETRONICS	VT30US440P WITH EB10/EBCM
		30	DAY-BRIGHT	D-W-A-E-XX-840-4-UNV-EMLED
		30	METALUX	4VT2-LD5-4-DR-UNV-L840-CD1-U / EL1XW
T1	TRACK LIGHTING, MOUNT 6" FROM OUTSIDE WALLS . PROVIDE A- TYPE HEADS AS SHOWN (STORE)	(3)30	CONTECH	CTL XX XX 4C D XX
		(3)30	LIGHTOLIER	LC-X-X-940-X-TE-LLAV11-X/60-XXN-XX
		(3)30	HALO	L809
T2	TRACK LIGHTING, PROVIDE A-TYPE HEADS MOUNTED TO 6X9" OR SIMILAR, SQUARE TRACK SYSTEM, VERIFY TRACK-HEAD QUANTITY AND ORIENTATION WITH PROJECT MANAGER. (STORE)	(18)30	CONTECH	CTL XX XX 4C D XX W/LT TRACK COMPONENTS
		(18)30	LIGHTOLIER	LC-X-X-940-X-TE-LLAV11-X/60-XXN-XX CORNERS
			TBD	TBD
W1	WALL MOUNTED, LINEAR DIRECT INDIRECT, ASSYMETRICAL TOP SHIELD / DEFLECTOR, (NATURE CENTER)	30	WILLIAMS	MX2WUD 4'00 L8840U/L8840D FA R DIM UNV
		30	LEDALITE	29-2-5/6-L-940-XX-WW-XX-U-E-XX
		30	NULITE	RW2-4-B-09-L40-UNV-D-1C-FRF-XX-X'
W3	WALL MOUNTED SCONCE / DOWNLIGHT, WEATHER PROOF, EXTERIOR, SQUARE, BLACK (COLUMN MOUNTED AT ENTRANCE SUPPORT COLUMNS)	30	CONTECH	SQL6X 40K MVD W X MCLR B
		30	ALUMILITE	YSW-XX/LED-UV/XX
		30	FC LIGHTING	FCCSQ600-
W4	WALL MOUNTED 2' LINEAR, DAMP RATED, (RESTROOM SINK VANITY)	5	LITETRONICS	SFS2
		5	DAY-BRITE	SDS-2-1224L-8CST-UNV-DIM
		5	METALUX	2SNX-SL3-LW-UNV-CC83-CD1
X/EM	LED SINGLE FACE, UNIVERSAL MOUNT DIE CAST EXIT/EMERGENCY COMBO WITH 90 MINUTE BATTERY BACKUP. DAMP LOCATION LISTED.	5	EMERGILITE	L W SBX14 R 2 10 LA
		5	CHLORIDE	VLTCR3R-3.6-R-W-W
		5	EVENLITE	TDCOM-R-1-
TL	TAPE LIGHT		NOVA FLEX	PRO SERIES COMMERCIAL-GRADE, 80+cri
			OMNI LIGHT	TBD
			JESCO	DL-FLEX2
FL1	FLOOD LIGHT, EXTERIOR, DIE CAST ALUMINUMN, SPOT.		LSI	XFLM SP LED 28 NW UNV BLK
			ALUMILITE	AM100 AM1 WM 1A40K
			FC LIGHTING	FCW1010 UNV 35K 38L BKE



1 ELECTRICAL RISER DIAGRAM, SHOWERHOUSE

E-5-0 SCALE: NTS

NOTES	MOUNT: SURFACE			120/240		1-PHASE, 3W		PANEL		MDP		CAPACITY: 300A							NOTES
	LOCATION: UTILITY RM							LUGS:		MCB		DEMAND LOAD: 163A							
	CKT	LTG	REC	MOT	MSC	FH	DESCRIPTION	AMP	POLE	⊕	AMP	POLE	DESCRIPTION	LTG	REC	MOT	MSC	FH	
	1	0.54					RECEPT, GFI, CONV	20	1	A	20	1	LTG, EXHIBIT, PERIMETER	0.24					2
	3	0.18					RECEPT, IT	20	1	B	20	1	LTG, EXHIBIT, PERIMETER	0.24					4
	5	0.18					RECEPT, RM 104, MECH	20	1	A	20	1	LTG, EXHIBIT, TRACK	0.72					6
	7	0.54					RCPT, EXHIBIT NW	20	1	B	20	1	LTG, EXHIBIT, TRACK	0.72					8
	9	1.4					RCPT, EXHIBIT SE	20	1	A	20	1	LTG, EXHIBIT, TRACK	0.72					10
	11				0.3		LIGHTING CONTROLS	20	1	B	20	1	LTG, LOBBY	0.25					12
	13						SPARE	20	1	A	20	1	LTG, LOBBY	0.25					14
	15						SPARE	20	1	B	20	1	LTG, LOBBY	0.25					16
	17						SPARE	20	1	A	20	1	LTG, MECH RM	0.18					18
	19						SPARE	20	1	B	20	1	LTG, RR & CLOSET	0.24					20
	21						SPARE	20	1	A	20	1	LTG, EXT SCONCES	0.25					22
	23						SPARE	20	1	B	20	1	SPARE						24
	25						SPARE	20	1	A	20	1	SPARE						26
	27						SPARE	20	1	B	20	1	SPARE						28
	29						SPARE	20	1	A	20	1	TRANSFORMER, HVAC				0.25		30
	31						SPARE	20	1	B	20	1	EW1H1					0.5	32
	33						SPARE	20	1	A	20	1	EW1H2					0.5	34
	35						SPARE	20	1	B	20	1	SPARE						36
	37					1.7	UH1			A	20	1	HWRP-1				0.5		38
	39					1.7		20	2	B	20	1	WH-1				1.5		40
	41		1				HAND DRYER RR			A	20	1	SPARE						42
	43		1					20	2	B	20	1	SPARE						44
	45		1				HAND DRYER RR			A	20	1	SPARE						46
	47		1					20	2	B	20	1	SPARE						48
	49					3.1	HP1			A			HP2					1.5	50
	51					3.1		50	2	B								1.5	52
	53					4.5	AHU1			A			AHU2					1.5	54
	55					4.5		90	2	A		30						1.5	56
	57						SPARE	20	1	A	20	1	SPARE						58
	59						SPARE	20	1	B	20	1	SPARE						60
PHASE BALANCE				LOAD TYPE		CONNECTED		DEMAND		DEMAND FORMULA				TOTAL LOAD					
				LIGHTING		4.1 KVA		4.1 KVA		100% LOAD				CONNECTED		DEMAND			
⊕ LOAD %				RECEPTACLE		2.8 KVA		2.8 KVA		10KVA + 50% REMAINDER NEC 220.44				39.1 KVA		39.1KVA			
A 20.0 KVA 51%				MOTOR		0.0 KVA		0.0 KVA		LOAD X 100% +125% LARGEST				162.7A		162.7A			
B 19.0 KVA 49%				MSC		6.6 KVA		6.6 KVA		LOAD X 100% NEC 210.19 NON-CONT.									
				FH		25.6 KVA		25.6 KVA		FIXED HEATING 100% LOAD									
NOTES: SEE POWER RISER DIAGRAM E-3 FOR ADDITIONAL PANEL INFORMATION																			



SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
 - a. "Metal Doors and Frames"
 - b. "Flush Wood Doors"
 - c. "Stile and Rail Wood Doors"
 - d. "Interior Aluminum Doors and Frames"
 - e. "Aluminum-Framed Entrances and Storefronts"
 - f. "Stainless Steel Doors and Frames"
 - g. "Special Function Doors"
 - h. "Entrances"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
 2. Recommended Locations for Builders Hardware
 3. Keying Systems and Nomenclature
 4. Installation Guide for Doors and Hardware
- C. NFPA – National Fire Protection Association
1. NFPA 70 – National Electric Code
 2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
 3. NFPA 101 – Life Safety Code
 4. NFPA 105 – Smoke and Draft Control Door Assemblies
 5. NFPA 252 – Fire Tests of Door Assemblies
- D. ANSI - American National Standards Institute
1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
 2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
 3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
 4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
 5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
 - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
 - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
 - a. Wiring Diagrams: For power, signal, and control wiring and including:
 - 1) Details of interface of electrified door hardware and building safety and security systems.
 - 2) Schematic diagram of systems that interface with electrified door hardware.
 - 3) Point-to-point wiring.
 - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.

- a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
- 4. Door Hardware Schedule:
 - a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
 - b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
 - c. Indicate complete designations of each item required for each opening, include:
 - 1) Door Index: door number, heading number, and Architect's hardware set number.
 - 2) Quantity, type, style, function, size, and finish of each hardware item.
 - 3) Name and manufacturer of each item.
 - 4) Fastenings and other pertinent information.
 - 5) Location of each hardware set cross-referenced to indications on Drawings.
 - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
 - 7) Mounting locations for hardware.
 - 8) Door and frame sizes and materials.
 - 9) Degree of door swing and handing.
 - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
- 5. Key Schedule:
 - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
 - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
 - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
 - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
 - e. Provide one complete biting list of key cuts and one key system schematic illustrating system usage and expansion. Forward biting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
 - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
 - 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
 - 2. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
 - 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:

- a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
- b. Catalog pages for each product.
- c. Final approved hardware schedule edited to reflect conditions as installed.
- d. Final keying schedule
- e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
- f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
 - a. Fire door assemblies, in compliance with NFPA 80.
 - b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
 - a. For door hardware: DHI certified AHC or DHC.
 - b. Can provide installation and technical data to Architect and other related subcontractors.
 - c. Can inspect and verify components are in working order upon completion of installation.
 - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
 - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.

- b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
 - 2. Smoke and Draft Control Door Assemblies:
 - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
 - b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
 - 3. Electrified Door Hardware
 - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
 - 4. Accessibility Requirements:
 - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
- 1. Keying Conference
 - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2) Preliminary key system schematic diagram.
 - 3) Requirements for key control system.
 - 4) Requirements for access control.
 - 5) Address for delivery of keys.
 - 2. Pre-installation Conference
 - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - b. Inspect and discuss preparatory work performed by other trades.
 - c. Inspect and discuss electrical roughing-in for electrified door hardware.
 - d. Review sequence of operation for each type of electrified door hardware.
 - e. Review required testing, inspecting, and certifying procedures.
 - f. Review questions or concerns related to proper installation and adjustment of door hardware.
 - 3. Electrified Hardware Coordination Conference:
 - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.

- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Mortise: 3 years
 - 2) Exit Devices
 - a) 3 years
 - 3) Closers
 - a) 30 years
 - 4) Automatic Operators
 - a) 2 years
 - b. Electrical Warranty
 - 1) Exit Devices

- a) 1 year
- c. ~~Mechanical Warranty~~
 - 1) ~~Locks~~
 - a) ~~Mortise: 3 years~~
 - b) ~~Residential (F Series): Limited Lifetime~~
 - c) ~~Residential Smart Wifi Lever: Limited Lifetime~~
 - 2) ~~Closers~~
 - a) ~~30 years~~
- d. ~~Electrical Warranty~~
 - 1) ~~Locks~~
 - a) ~~Residential Smart Wifi Lever: 3 year~~

1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
 - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 MATERIALS

- A. Fabrication

1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

C. Cable and Connectors:

1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Ives 5BB series
2. Acceptable Manufacturers and Products:
 - a. Hager BB1191/1279 series
 - b. Best FBB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
 - a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
 - b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
 - a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high
5. 2 inches or thicker doors:
 - a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
 - b. Interior: Heavy weight, steel, 5 inches (127 mm) high

6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
8. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - a. Steel Hinges: Steel pins
 - b. Non-Ferrous Hinges: Stainless steel pins
 - c. Out-Swinging Exterior Doors: Non-removable pins
 - d. Out-Swinging Interior Lockable Doors: Non-removable pins
 - e. Interior Non-lockable Doors: Non-rising pins
9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Select
 - b. Best

B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.05 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer and Product:
 - a. Von Duprin EPT-10
2. Acceptable Manufacturers and Products:
 - a. Securitron CEPT-10

b. Precision EPT-12C

B. Requirements:

1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

2.06 MORTISE LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Schlage L9000 series
2. Acceptable Manufacturers and Products:
 - a. Accurate 9000/9100 series
 - b. Best 45H series

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches.
7. Provide motor based electrified locksets that comply with the following requirements:
 - a. Universal input voltage – single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
 - b. Fail Safe/Fail Secure – changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case.
 - c. Low maximum current draw – maximum 0.4 amps to allow for multiple locks on a single power supply.
 - d. Low holding current – maximum 0.01 amps to produce minimal heat, eliminate "hot levers" in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
 - e. Connections – provide quick-connect Molex system standard.
8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
 - a. Lever Design: 06.

~~2.07 TUBULAR LOCKS – GRADE 2~~

~~A. Manufacturers and Products:~~

- ~~1. Scheduled Manufacturer and Product:
a. Schlage F series~~
- ~~2. Acceptable Manufacturers and Products:
a. Arrow C series
b. Sargent DL series~~

~~B. Requirements:~~

- ~~1. Provide tubular locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 2, Grade 2 and ANSI/BHMA A156.39 Residential Grade AAA, and UL Listed for 3-hour fire doors.~~
- ~~2. Cylinders: Refer to "KEYING" article, herein.~~
- ~~3. Provide locks with standard 2-3/8 inches (60 mm) adjustable to 2-3/4 inches (70 mm) backset with 1/2 inch (13 mm) latch throw. Provide 2-3/4 inches (70 mm) backset, unless 2-3/8 inches (60 mm) is required by door or frame detail or noted otherwise.~~
- ~~4. Provide locksets that fit standard 2-1/8 inches (54 mm) diameter bore without use of thru bolts.~~
- ~~5. Door Thickness: Locksets adjustable to fit in 1-3/8 inches (35 mm) or 1-3/4 inches (44 mm) door thickness.~~
- ~~6. Provide standard T-strikes unless extended lip strikes are necessary to protect trim.~~
- ~~7. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
a. Lever Design: VLA~~

~~2.08 ELECTRONIC PROGRAMMABLE INTERCONNECTED LOCKSETS~~

~~A. Manufacturers and Products:~~

- ~~1. Scheduled Manufacturer and Product:
a. Schlage FE789WBC~~
- ~~2. Acceptable Manufacturers and Products:
a. No Substitute~~

~~B. Product: Schlage FE789WBC Smart Wifi Lever lockset.~~

- ~~1. Provide interlocked locksets conforming to ANSI A156.12 Series 5000, Grade 2 with simultaneous retraction of deadbolt and latch for single motion egress.~~
- ~~2. Provide locks with 2-3/4 inches (70 mm) backset, based on door detail, with 1/2-inch (13 mm) latch throw latchbolt and 1 inch (25 mm) throw deadbolt.~~
- ~~3. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.~~
- ~~4. Provide manufacturers standard T-strike, unless extended lip strike is necessary to protect trim, and deadbolt strike.~~
- ~~5. Rose/Escutcheon Design: Camelot~~
- ~~6. Lever Design: VLA~~

~~C. Requirements~~

- ~~1. Provide programmable electronic locksets with the following:
a. Time and Date controlled access.~~

- ~~b. Up to 500 user.~~
- ~~c. 1000 event Audit Trail report.~~
- ~~d. 8 time zone capability~~
- ~~2. Provide entry by a Key fob that supports Schlage MIFARE classic, Schlage DESFire EV1/EV3 and Schlage Mobile credentials.~~
- ~~3. Provide power by four (4) AA batteries (included), where if loss of battery power occurs, a 9V battery can be used to jump start the lock and provide access with an assigned credential. Battery life of 2 years in OFF-LINE MODE.~~
- ~~4. Provide programming of lock thru free Schlage Home software with the use of Owner furnished smart device~~

2.09 EXIT DEVICES

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
 - a. Von Duprin 99/33A series
- 2. Acceptable Manufacturers and Products:
 - a. Detex Advantex series
 - b. Precision APEX 2000 series

B. Requirements:

- 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
- 2. Cylinders: Refer to "KEYING" article, herein.
- 3. Provide grooved touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
- 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
- 7. Provide flush end caps for exit devices.
- 8. Provide exit devices with manufacturer's approved strikes.
- 9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 14. Provide electrified options as scheduled.
- 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.

16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
17. Special Options:
 - a. SI
 - 1) Provide dogging indicators for visible indication of dogging status.
 - b. XP
 - 1) Rim Exit Devices: provide devices with non-tapered smart latchbolt with 90° latchbolt to strike engagement under stress and Static Load Resistance of 2000 pounds.
 - c. QM
 - 1) Rim Exit Devices: provide devices with damper-controlled re-latching to reduce operational noise. Where lever trim is specified, provide damper controlled lever return.
 - d. HH
 - 1) Provide wind and impact rated hurricane exit devices and mullions certified to comply with Florida Building Code (FBC) TAS 201, 202, 203.
 - e. HW
 - 1) Provide wind rated hurricane exit devices and mullions certified to comply with ANSI-ASTM E330.
 - f. CX
 - 1) Provide delayed egress devices, where scheduled, that are UL 294 listed, meet National Fire Protection Association (NFPA) and International Building Code (IBC) governing delayed egress, and/or other local and national fire codes acceptable to authority having jurisdiction as required.
 - a) Provide non-handed and field sizable device with 3/4 (19mm) throw deadlocking latch bolt. Device incorporates an internal RX switch that detects attempt to exit from applying less than 15lbs to the push pad, which causes this switch to start an irreversible alarm cycle. Key switch in device is capable of arming, disarming, or resetting the device; and indicator lamp determines status of the device
 - b) Provide devices capable of standard 15 second release delay and indefinite release delay as required by code, when tied into fire alarm system will release immediately when an alarm condition exists.
 - c) Provide devices with all control inputs – door position input, external inhibit input, fire alarm input; auxiliary locking; nuisance alarm and internal horn; and, remote signaling output self-contained in the device assembly.
 - g. CVC
 - 1) Provide cable-actuated concealed vertical latch system in two-point for non-rated or fire rated wood doors up to a 90 minute rating and less bottom latch (LBL) configuration for non-rated or fire rated wood doors up to 20 minute rating. Vertical rods not permitted.
 - a) Cable: Stainless steel with abrasive resistant coating. Conduit and core wire ends snap into latch and center slides without use of tools.
 - b) Wood Door Prep: Maximum 1 inch x 1.1875 inch x 3.875 inches top latch pocket and 1 inch x 1.1875 inch x 5 inches bottom latch pocket which does not require the use of a metal wrap or edge for non-rated or fire rated wood doors up to a 45 minute rating.
 - c) Latchbolts and Blocking Cams: Manufactured from sintered metal low carbon copper- infiltrated steel, with molybdenum disulfide low friction coating.
 - d) Top Latchbolt: Minimum 0.38 inch (10 mm) and greater than 90-degree engagement with strike to prevent door and frame separation under high static load.
 - e) Bottom Latchbolt: Minimum of 0.44-inch (11 mm) engagement with strike.
 - f) Product Cycle Life: 1,000,000 cycles.

- g) Latch Operation: Top and bottom latch operate independently of each other. Top latch fully engages top strike even when bottom latch is compromised. Separate trigger mechanisms not permitted.
- h) Latch release does not require separate trigger mechanism.
- i) Cable and latching system characteristics:
 - i. Installed independently of exit device installation, and capable of functioning on door prior to device and trim installation.
 - ii. Connected to exit device at single point in steel and aluminum doors, and two points for top and bottom latches in wood doors.
 - iii. Bottom latch height adjusted, from single point for steel and aluminum doors and two points for wood doors, after system is installed and connected to exit device, while door is hanging
 - iv. Bottom latch position altered up and down minimum of 2 inches (51 mm) in steel and aluminum doors without additional adjustment. Bottom latch deadlocks in every adjustment position in wood doors.
 - v. Top and bottom latches in steel and aluminum doors and top latch in wood doors may be removed while door is hanging.

2.10 CYLINDERS

A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
 - a. ~~Schlage 5 Pin "C" Keyway~~
 - b. Schlage Everest
- 2. Acceptable Manufacturers and Products:
 - a. No Substitute

B. Requirements:

- 1. ~~Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.~~
- 2. Provide cylinders/cores compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset; manufacturer's series as indicated. Refer to "KEYING" article, herein.
- 3. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. Patented Open: cylinder with interchangeable core with open keyway.
- 4. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
- 5. Nickel silver bottom pins.

2.11 KEYING

A. Scheduled System:

- 1. New factory registered system:

- a. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Construction Keying:
 - a. Replaceable Construction Cores.
 - 1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
 - a) 3 construction control keys
 - b) 12 construction change (day) keys.
 - 2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.
2. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
 - e. Quantity: Furnish in the following quantities.
 - 1) Permanent Control Keys: 3.
 - 2) Master Keys: 6.
 - 3) Change (Day) Keys: 3 per cylinder/core that is keyed differently
 - 4) Key Blanks: Quantity as determined in the keying meeting.

2.12 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Telkee
2. Acceptable Manufacturers:
 - a. No Substitute
 - b. HPC
 - c. Lund

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
 - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
 - b. Provide hinged-panel type cabinet for wall mounting.

2.13 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN 4040XP series
2. Acceptable Manufacturers and Products:
 - a. Corbin-Russwin DC8000 series
 - b. Sargent 281 series

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.14 ELECTRO-MECHANICAL AUTOMATIC OPERATORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. LCN Senior Swing
2. Acceptable Manufacturers and Products:
 - a. Besam Swingmaster MP
 - b. Stanley Access Technologies M-Force

B. Requirements:

1. Provide low energy automatic operator units that are electro-mechanical design complying with ANSI/BHMA A156.19.
 - a. Opening: Powered by DC motor working through reduction gears.
 - b. Closing: Spring force.
 - c. Manual, hydraulic, or chain drive closers: Not permitted.
 - d. Operation: Motor is off when door is in closing mode. Door can be manually operated with power on or off without damage to operator. Provide variable adjustments, including opening and closing speed adjustment.
 - e. Cover: Aluminum.
2. Provide units with manual off/auto/hold-open switch, push and go function to activate power operator, vestibule interface delay, electric lock delay, hold-open delay adjustable from 1 to 32 seconds, and logic terminal to interface with accessories, mats, and sensors.
3. Provide drop plates, brackets, and adapters for arms as required to suit details.
4. Provide motion sensors and/or actuator switches, and receivers for operation as specified. Provide weather-resistant actuators at exterior applications.
5. Provide key switches, with LED's, recommended and approved by manufacturer of automatic operator as required for function as described in operation description of hardware sets. Cylinders: Refer to "KEYING" article, herein.
6. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.

2.15 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Trimco

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Size plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.16 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:
 - a. Glynn-Johnson
2. Acceptable Manufacturers:
 - a. Rixson
 - b. Sargent

B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

2.17 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Trimco

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.18 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Zero International
2. Acceptable Manufacturers:
 - a. Reese
 - b. Legacy

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.

2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.19 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:
 - a. Ives
2. Acceptable Manufacturers:
 - a. Burns
 - b. Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 2. Custom Steel Doors and Frames: HMMA 831.
 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
 4. Installation Guide for Doors and Hardware: DHI TDH-007-20

- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
 - 1. Install construction cores to secure building and areas during construction period.
 - 2. Replace construction cores with permanent cores as indicated in keying section.
 - 3. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
 - 1. Conduit, junction boxes and wire pulls.
 - 2. Connections to and from power supplies to electrified hardware.
 - 3. Connections to fire/smoke alarm system and smoke evacuation system.
 - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
 - 5. Connections to panel interface modules, controllers, and gateways.
 - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Overhead Stops/Holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.

- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.

- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

Hardware Group No. 01A – Door 100

~~DOOR SHALL INCLUDE POWER ACTUATED OPENER ON BOTH DOORS WITH REMOTE PEDESTAL MOUNTED ACTUATOR BUTTON ON THE EXTERIOR – JAMB MOUNTED ACTUATOR AT THE INTERIOR SIDE OF DOOR. SEE DRAWINGS FOR LOCATIONS OF DOOR OPENER PEDESTAL AND DOOR JAMB LOCATED DOOR OPENER BUTTON. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS.~~

~~EACH TO HAVE:~~

Qty		Description	Catalog Number	Finish	Mfr
2	EA	CONTINUOUS HINGE	026XY-83	628	IVE
2	EA	PANIC HARDWARE	9947-L-06 W/200 TOP STRIKE; 304L BOT. STRIKE	626	VON
2	EA	CORE ONLY	23-030	626	SCH
2	EA	RIM CYLINDER	AS REQUIRED	626	SCH
2	EA	SURFACE CLOSER	4041-MC-X-61	689	LCN
2	EA	OVERHEAD STOP	400S	630	GLY
4	EA	THRESHOLD	896S	AL	NGP
4	SET	SEALS	9450B	AL	NGP
4	SET	MEETING SEAL	5050W	W	NGP

Hardware Group No. 01A – Door 100

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	628	IVE
1	EA	CONT. HINGE	112XY EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	PANIC HARDWARE	CD-9947-L-DT-06	626	VON
1	EA	ELEC PANIC HARDWARE	CD-LX-9947-L-NL-06	626	VON
2	EA	MORTISE CYLINDER	20-059 - CAM & BLOCKING RING AS REQUIRED.	626	SCH
1	EA	RIM HOUSING	20-079	626	SCH
3	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	100S	630	GLY
2	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	SURF. AUTO OPERATOR	9540	ANCLR	LCN
1	EA	ACTUATOR, TOUCH	8310-818	630	LCN
1	EA	ACTUATOR, TOUCH	8310-852	630	LCN
2	EA	DOOR SWEEP	8198AA	AA	ZER
1	EA	THRESHOLD	65A	A	ZER

NOTE: DOOR SHALL INCLUDE POWER ACTUATED OPENER ON ONE DOOR WITH REMOTE PEDESTAL-MOUNTED ACTUATOR BUTTON ON THE EXTERIOR – JAMB-MOUNTED ACTUATOR AT THE INTERIOR SIDE OF DOOR. SEE DRAWINGS FOR LOCATIONS OF DOOR OPENER PEDESTAL AND DOOR JAMB-LOCATED DOOR OPENER BUTTON. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LX SWITCH IN PANIC DEVICES ARE TO BE USED FOR DISABLING THE AUTOMATIC OPERATOR ACTUATORS WHEN THE DEVICES ARE NOT DOGGED DOWN.

PERMITER AND MEETING STILE SEALS BY DOOR MANUFACTURER.

Hardware Group No. 01B – Door 109

NOTE: DOOR SHALL INCLUDE POWER ACTUATED OPENER ON BOTH DOORS WITH REMOTE WALL MOUNTED ACTUATOR BUTTON WITHIN THE ENTRY VESTIBULE (100). PROVIDE JAMB-MOUNTED ACTUATOR AT THE INTERIOR SIDE OF DOOR. SEE DRAWINGS FOR LOCATIONS OF WALL MOUNTED BUTTON AND DOOR JAMB-LOCATED DOOR OPENER BUTTON. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS.

Each To Have:

Qty		Description	Catalog Number	Finish	Mfr
2	EA	CONTINUOUS HINGE	026XY-83	628	IVE
2	EA	PANIC HARDWARE	9947-L-06 W/299 TOP STRIKE; 304L BOT. STRIKE	626	VON
2	EA	CORE ONLY	23-030	626	SCH
2	EA	RIM CYLINDER	AS REQUIRED	626	SCH
2	EA	SURFACE CLOSER	4041 MC X-61	689	LCN
2	EA	OVERHEAD STOP	100S	630	GLY

Hardware Group No. 01B – Door 109

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY	628	IVE
1	EA	CONT. HINGE	112XY EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	PANIC HARDWARE	CD-9947-L-DT-06	626	VON
1	EA	ELEC PANIC HARDWARE	CD-LX-9947-L-NL-06	626	VON
2	EA	MORTISE CYLINDER	20-059 - CAM & BLOCKING RING AS REQUIRED.	626	SCH
1	EA	RIM HOUSING	20-079	626	SCH
3	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	100S	630	GLY
1	EA	SURF. AUTO OPERATOR	9540	ANCLR	LCN
1	EA	ACTUATOR, TOUCH	8310-818	630	LCN
1	EA	ACTUATOR, TOUCH	8310-852	630	LCN

NOTE: DOOR SHALL INCLUDE POWER ACTUATED OPENER ON ONE DOOR WITH REMOTE WALL-MOUNTED ACTUATOR BUTTON WITHIN THE ENTRY VESTIBULE (100). PROVIDE JAMB-MOUNTED ACTUATOR AT THE INTERIOR SIDE OF DOOR. SEE DRAWINGS FOR LOCATIONS OF WALL-MOUNTED BUTTON AND DOOR JAMB-LOCATED DOOR OPENER BUTTON. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS.

LX SWITCH IN PANIC DEVICES ARE TO BE USED FOR DISABLING THE AUTOMATIC OPERATOR ACTUATORS WHEN THE DEVICES ARE NOT DOGGED DOWN.

Hardware Group No. 02

~~NOTE: PUBLIC RESTROOM LOCKSETS SHALL BE EQUIPPED WITH OCCUPANCY NOTIFICATION FEATURE. LOCKSET SHALL INCLUDE "OCCUPIED" NOTIFICATION VISIBLE FROM THE EXTERIOR / OUTSIDE FACE OF THE DOOR.~~

~~Each To Have:~~

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	MORTISE PRIVACY LOCK WITH "OCCUPIED" INDICATOR	L9456-T06A-L283-722	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP-CUSH-MC	689	LCN
1	EA	DOOR WALL STOP	WS401CCV	626	IVE
2	EA	KICK PLATE	8400-8" X 2" LDW	630	IVE
1	SET	SEALS	9450B	BRN	NGP
1	EA	THRESHOLD	896S	AL	NGP

Hardware Group No. 02

NOTE: PUBLIC RESTROOM LOCKSETS SHALL BE EQUIPPED WITH OCCUPANCY NOTIFICATION FEATURE. LOCKSET SHALL INCLUDE "OCCUPIED" NOTIFICATION VISIBLE FROM THE EXTERIOR / OUTSIDE FACE OF THE DOOR.

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	MORTISE PRIVACY LOCK W/ "OCCUPIED INDICATOR	L9456T 06A 09-544 L283-722	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER
1	EA	DOOR BOTTOM	355AA	AA	ZER
1	EA	THRESHOLD	655A	A	ZER

Hardware Group No. 03

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	L9080T 06A F80 VLA	626	SCH
4	EA	FSIC CORE	23-030	626	SCH
1	EA	WALL STOP	WS406/407CVX	630 626	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 04

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
4	EA	STOREROOM LOCK	F80 VLA	626	SCH
4	EA	OVERHEAD STOP	100S	630	GLY
3	EA	SILENCER	SR66	BRN	IVE

Hardware Group No. 04

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	L9080T 06A	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	100S	630	GLY
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 04A

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	L9080T 06A	626	SCH
1	EA	FSIC CORE	23-030	626	SCH
1	EA	OH STOP	100S	630	GLY
1	EA	SURFACE CLOSER	4040XP REG OR PA AS REQ	689	LCN
1	EA	KICK PLATE	8400 8" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 05

Provide each PR door(s) with the following:

ALL REQUIRED HARDWARE BY EXTERIOR GATE MANUFACTURER:

- 1) HINGES TO BE ANCHORED TO CONCRETE WALLS AND ALLOW 180 DEGREE SWING OF STEEL-FRAMED GATES.
- 2) PROVIDE WITH PULL HARDWARE ON EXTERIOR SIDE OF GATES – NO PULL / PUSH PLATE REQUIRED ON INTERIOR SIDE OF DOOR.
- 3) PROVIDE TWO (2) ½ INCH DIAMETER X 18" LONG, J-BOLT DROP PINS AT EXTERIOR SIDE OF BOTH GATES. PROVIDE WITH ¾ INCH I.D. PIPES X 6" LONG FOR EMBEDDMENT WITHIN CONCRETE AT THRESHOLD TO SECURE GATE CLOSURE.

DOOR HARDWARE SET INDEX

Door#	HwSet#
100	01A
102	04
103	04 04A
104	04 04A
105	02
106	02
107	03
108	03
109	01B
200	05

END OF SECTION 08 71 00



BIDDER'S SUBSTITUTION REQUEST FORM

Dimensional Metals, Inc. – 58 Klema Drive North – Reynoldsburg, OH 43068 – 800-828-1510

Feinknopf Macioce Schappa Architects, Inc.

ARCHITECT

995 WEST 3RD AVE

STREET ADDRESS

Columbus

CITY

614-297-1020

PHONE

FAX

Lake Loramie State Park Welcome Center

PROJECT NAME

PROJECT NUMBER

We submit for your Consideration the following Product in addition to the specified Product for the above Project:

As per Section
No.

07 41 13.16

Paragraph No.

2.2

Specified
Product -

**Standing Seam Metal
Roof Panel**

We submit our

SL2018

Panel System.

(Attached you will find technical data and any laboratory tests, if applicable.)

The following changes will take place to the Drawings and Specifications for the proposed substitution's proper installation:

- A. Dimension changes in drawings - **None**
- B. DMI will or will not pay for changes to the design, including engineering and detailing costs caused by the substituted product – **Not applicable**
- C. Effects on other installers - **None**
- D. Differences between our panel and panel specified – **none**
- E. Warranty differences - **None**

The undersigned states that the function, appearance, and quality are equivalent or superior to the specified Product.

Submitted By:

Jeff Earley

SIGNATURE

Dimensional Metals, Inc

COMPANY NAME

58 Klema Drive North

STREET ADDRESS

Reynoldsburg

CITY

419.889.8427

PHONE

866.863.4334

FAX

11/27/2023

DATE

OH

STATE

43068

ZIP

FOR ARCHITECT'S USE ONLY



- ACCEPTED



- ACCEPTED AS NOTED



- NOT ACCEPTED



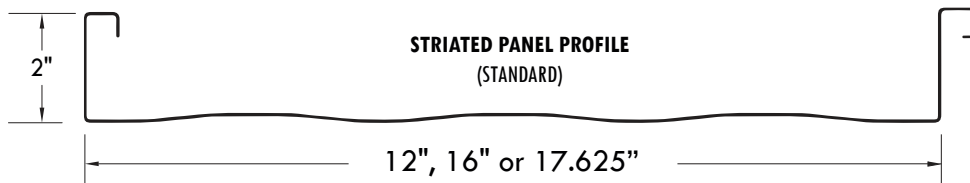
- TOO LATE

BY Joseph V. Pax, AIA, FMS Architects

12/08/23

ADDITIONAL REMARKS

PUBLISHED IN ADDENDUM NUMBER -



SPAN-LOCK SL20 is a structural panel that is mechanically seamed during installation. The panel is an integral interlocking system by design which installs in one direction from a given starting point. The Span-Lock is a very flexible panel that works well with a wide range of building designs.

Uses & Applications

Product uses include low to high slope roofing, vertical fascia, equipment screens, mansards, and wall panels. This system may also be installed on tapered roof areas.

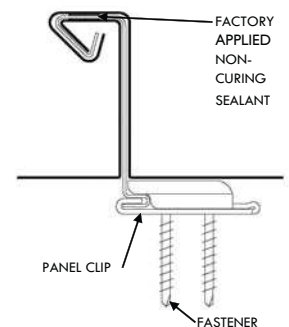
Advantages

- Factory Applied Non-Curing Sealant - for superior watertightness
- Mechanically seamed - may be installed on low slope applications down to 1/2:12 slope
- No Hand Seaming Required - built-in locking leg keeps the roof panel in place until ready to mechanically seam
- Multi-directional Mechanical Seaming - panel seaming simplified
- Expansion Clips - allows for thermal expansion and contraction
- Continuous Roll Formed Lengths - eliminates need for panel lap joints (4' min. panel length)
- Total System Warranties available - for total confidence

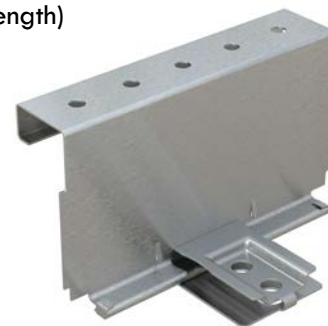
Performance Tested

- UL-580 Wind Uplift
- UL-2218 Impact Resistance
- ASTM E1592 Uniform Static Air Pressure
- ASTM E1646 Water Penetration
- ASTM E1680 Air Leakage
- ASTM E2140 Static Water Penetration

Please consult DMI for applicability of test reports for your project.



Seam Cross Section



Low Floating Expansion Clip

800.828.1510 ■ www.dmimetals.com ■ sales@dmimetals.com

PROVEN. DEPENDABLE. SUSTAINABLE.

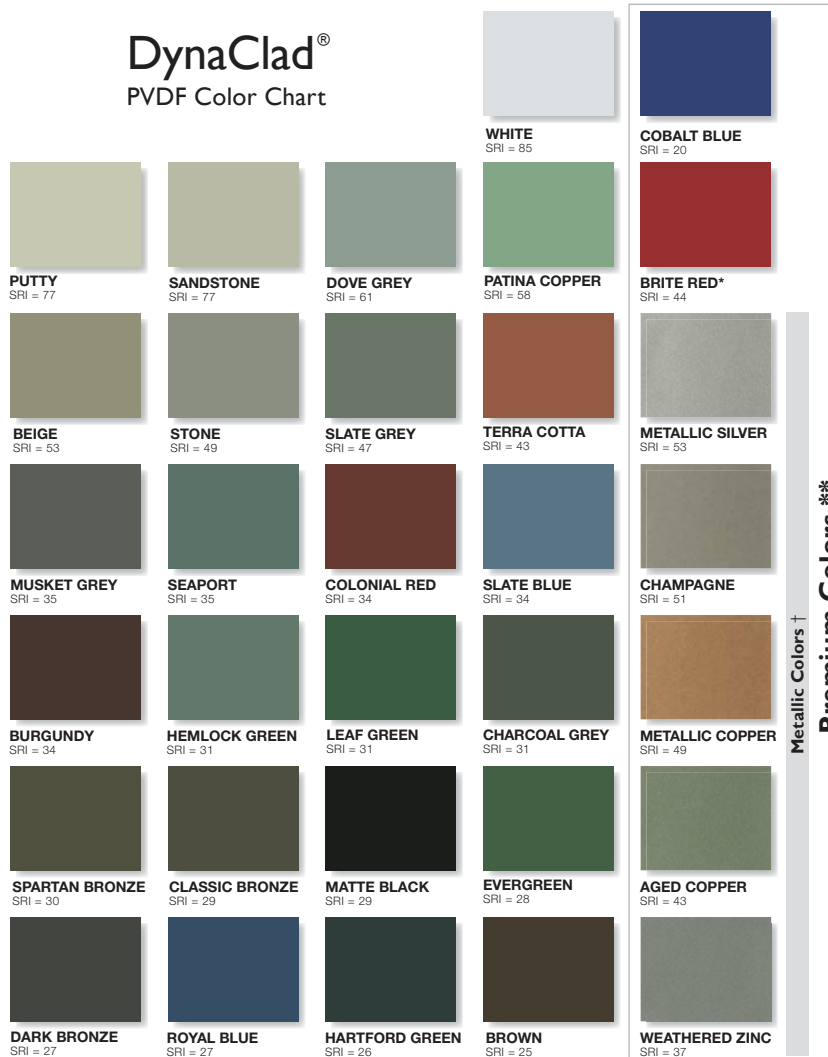
METAL ENVELOPE SYSTEMS SINCE 1988

Project Name: _____
 Architect: _____
 Installing Contractor: _____
 General Contractor: _____
 Specification Section: _____

Stiffener Profile



DynaClad® PVDF Color Chart



Custom Colors Available

Colors shown are samples and may vary slightly from actual material.
 Please consult DMI Color Chart for stacking color availability.

†Metallic colors are directionally sensitive and therefore entire roof areas should be ordered at once time to ensure uniformity.

*Brite Red has a clear coat. **Premium colors carry an upcharge.

Panel Width

12"
 16"
 18" (17.625")

Clip

Low Floating
 Fixed
 Long Fixed (Custom Application)

Substrate

24 ga. Galvalume®
 22 ga. Galvalume®
 .032 Aluminum
 .040 Aluminum

16 oz. Copper
 20 oz. Copper

Embossed:

Consult DMI for minimum quantities, upcharges, set up fees and extended lead times

Standard Finishes (N/A on Mill Finishes)

DynaClad® PVDF: _____
 Acrylic Coated Galvalume (Acrylume®)
 Clear Anodized Aluminum

Premium Finishes*

DynaClad® Metallic PVDF: _____
 DynaClad® Brite Red PVDF
 DynaClad® Cobalt Blue PVDF
 DynaClad® Standard Color PVDF w/ Clearcoat: _____
 DynaClad® Premium Color PVDF w/ Clearcoat: _____
 Custom Color: _____

*Premium Colors subject to minimum quantities, extended lead times and upcharges.
 Consult DMI for details.

Warranty

Finish

DynaClad® Paint Finish
 Galvalume® 20 Year - 6 Month (Substrate)
 Aluminum Sheet 2 Year (Substrate)

Watertight

DynaClad® Metal Roofing System: _____
 DynaClad® Metal Roofing System NDL: _____

Since 1988 Dimensional Metals, Inc. (DMI) has specialized in the manufacturing of architectural metal roof and wall panel systems as well as fabricated architectural sheet metal for the construction industry. We are backed by decades of proven metal envelope design, dependable Technical Field Services, and an Engineering Department delivering sustainable solutions. You are sure to find the product that will best enhance your design.

800.828.1510 ■ www.dmimetals.com ■ sales@dmimetals.com

PROVEN. DEPENDABLE. SUSTAINABLE.

METAL ENVELOPE SYSTEMS SINCE 1988

Dimensional Metals, Inc. offers a wide range of innovative roofing and waterproofing products for the building industry. With more than 25 years of field experience, DMI products are engineered for superior performance and ease of installation.

DESCRIPTION

DynaClad® Ultra HT Wind & Water Seal™ is a self-adhering waterproofing underlayment composed of a non-slip, cross-laminated polymer film, laminated to a high temperature, aggressive rubberized asphalt adhesive. A protective split release liner is removed during installation. Ultra HT is engineered for use under metal roofing systems. Ultra HT adheres aggressively to most clean, dry substrates including Rigid Insulation, Plywood and Metal Deck. Prime masonry, weathered OSB, exterior grade gypsum roofing products and aged metal surfaces as necessary to achieve good adhesion. Product self-seals around punctures such as screws and nails. This advanced system limits damage caused by water penetration or leaks. Ultra HT is ideal for secondary water resistance and prevents damage from ice dams and wind-driven rain.

USES

Whole-roof underlayment for metal roofing. Use at eaves, valleys, rakes and around roof penetrations for protection against ice dams and wind-driven rain. For roof slopes less than 3:12 DMI Requires a full layer of Ultra HT on the entire field of the roof.

FEATURES

Ultra HT offers the contractor and property owner these extra features:

- Uniform thickness for dependable protection
- Self-seals around fasteners including screws and nails
- High elongation, flexible, accommodates expansion and contraction of the substrate
- Compatible with most construction sealants and primers
- Eliminates leaks - multiple layers of protection seals out water
- Rubberized asphalt won't crack or dry - protects against ice, wind and rain
- Aggressively adheres - sticks to plywood, metal and most other building materials for ease of application.
- Non-slip surface and overlap guide lines for easy installation
- White, heat reflective surfaces allows for adhesion directly to Extruded and Poly-Isosyanurate Insulation

INSTALLATION

- Surface must be clean, dry and free from oil
- Apply in clear, dry weather at 50°F or above
- Clean, dry wood and metal surfaces do not require priming
- Prime masonry, weathered OSB, exterior grade gypsum roofing products and aged metal surfaces as necessary
 - masonry must be fully cured
- Minimum 3" side laps and 6" end laps
- Apply uniform pressure with a 2 - 3" hand roller to the seams and overlaps
- Do not expose to direct sunlight for more than 90 days
- Do not install over solvent-based sealants unless fully cured
 - active solvents may liquify bottom adhesive surface
- Installer is responsible for compatibility with caulks and sealants
- Material folded over a roof edge cannot be left exposed, fasten every 6" and cover



PRODUCT DATA

Installation Temperature Range	>50°F
Material Color	White
Roll Width	36"
Roll Length	67 ft
Carton Weight	52 lbs
Rolls per Carton	1
Area per Carton	200 sqft
Cartons per Pallet	30
Max Temp.	250°F

TECHNICAL SPECIFICATIONS

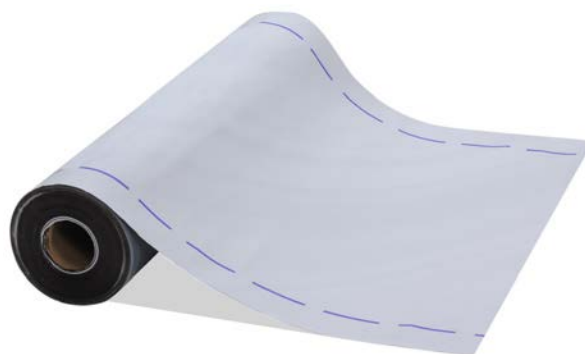
Property	Test Method	Result
Material Thickness	ASTM D 5147	45 Mils Nom.
Flexibility @ -20°F	ASTM D 1970	Pass
Vapor Permeance	ASTM E 96	<0.02
Nail Sealability	ASTM D 1970	Pass
Adhesion to Plywood @75°F	ASTM D 903/1970	>12 lbs/ft
Adhesion to Plywood @40°F	ASTM D 903/1970	>2 lbs/ft

Results based on modified ASTM standards

DynaClad® Metal Roofing System Limited Warranty

Ultra HT Wind & Water Seal™ qualifies and is covered under DMI's DynaClad® Metal Roofing System Limited Warranty.

For the most current Installation Instructions, Warranties, Technical Specifications and Approvals, visit www.dmmetals.com.



Proven • Dependable • Sustainable
Metal Envelope Systems Since 1988

58 Klema Drive North - Reynoldsburg, OH 43068
 tel: 800.828.1510 - fax: 740.927.3319
 web: www.dmmetals.com

S-5!®

The Right Way!

ColorGard® is the only snow retention system to be warranted for the life of the roof! Its unsurpassed holding strength and perfect color-match are guaranteed!



ColorGard®

When snow accumulations begin to melt, the result can be catastrophic as the blanket of snow avalanches off the roof, dumping tons of snow onto anything in its path, damaging landscape, gutters, adjacent roofs, vehicles, and causing injury or death to passers-by. ColorGard® dramatically reduces the risks associated with rooftop avalanches and maintains the clean colorful appearance of the roof with perfect color and finish matching, which lasts as long as the roof itself! ColorGard is the only snow retention system designed and

engineered on a site-specific basis; guaranteed to perform, to not damage the roof or finish, and to exactly match the roof color—for the entire life of the roof*.

Today's premium Kynar 500® and Hylar 5000® (PVDF) paint systems used on metal panels are "coil-coated" and oven-cured. This is the only finish application method that can be warranted against color fade for 30 years or longer. Nothing can equal it! So, why settle for less in a snow guard system? While some dyes, powder-coats and air-dried color application methods may initially simulate a perfect match, the color soon begins to fade and becomes increasingly mismatched with a few years of age. By utilizing a strip of the actual roof material, ColorGard perfectly matches the roof—forever!

ColorGard is mechanically attached with patented S-5!® clamps. S-5! is the trusted name in metal rooftop attachment technology worldwide. S-5! patented, round-point setscrews grip the seam securely without penetration and without damage to the panel's protective finishes. The clamps are precision-machined from aircraft quality, high tensile aluminum—not cast or plastic. All related hardware is non-ferrous stainless steel for lasting performance.

*See optional limited ColorGard System Warranty Program information at www.S-5-ColorGard.com

The right way to attach almost anything to metal roofs!

ColorGard®



888-825-3432 | www.S-5.com |

S-5!®

The Right Way!

ColorGard® dramatically reduces the risks associated with rooftop avalanches and maintains the clean, colorful appearance of the roof with perfect color and finish matching, which lasts as long as the roof itself! S-5!® is the only manufacturer of snow retention systems that can be designed and engineered on a site-specific basis.

Can ColorGard® be Retrofitted to an Existing Roof?



Yes, **ColorGard®** can be easily retrofitted to existing roofs, or incorporated into new construction design. Using S-5!® CorruBrackets™ or VersaBrackets™, ColorGard installs perfectly on corrugated and exposed-fastened roofs. ColorGard can be installed any time of year.

Is Design Assistance Available For ColorGard®?

Yes! It is critical to design a solution that takes into account the effects of gravity on a snow-covered roof. The tested holding strength of ColorGard must be checked and proven against the actual “in-service” gravity loads of the roof. This important step in application engineering should not be omitted for any snow retention product.



Consult with your distributor or use our online calculator at **www.S-5.com** to help quickly and easily design each job. The calculator will help you “tailor” the ColorGard system on a project-specific basis, allowing for all the variables involved—and even provide a printout of the calculations and a material requirement list.

S-5! also offers its Certified Engineer Stamp Program. To receive the engineer stamp of approval, simply submit your project calculations to our registered engineer for a professional review. Learn more at **www.S-5.com/Calculator**.

How Easy is it to Install?

Once designed, ColorGard is easy to install, requiring tools that are common to the trade. Because S-5! ColorGard uses mechanical attachment rather than adhesives, installation can be done any time of year, with no cleaning, no priming, no cure times, and no callbacks!

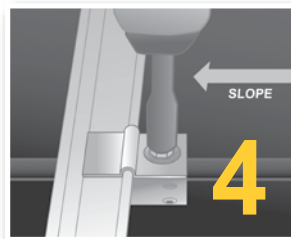
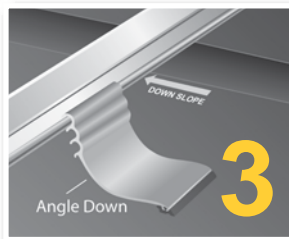
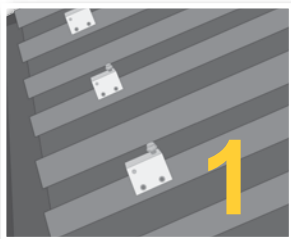
What About Cost?

ColorGard is the best buy on the market! This is the best news of all! ColorGard has greater holding strength, better aesthetics, longer service life, and lower installed cost than any other bar-type system on the market. Pound-for-pound of holding strength, ColorGard is a better buy than individual cleats or glued units.

Why is S-5!® the Best Choice?

The premium finishes used on today’s metal roof products are fluorocarbons—paint resins that are similar in chemical composition to “Teflon,” the popular non-stick coating. The benefits of this type of paint are related to its nonstick characteristics. Chemical bonds like tapes, glues and adhesives, therefore, provide only temporary and unreliable solutions. Other mechanical alternatives that involve penetrating the roof or galling the surface result in leakage, corrosion, and voided warranties. Thanks to our patented round-point setscrews, S-5! clamps do not pierce metal paneling, thereby protecting roof coatings and weather-tightness warranties.

Check out our
ColorGard® Mobile Calculator



S-5!® Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

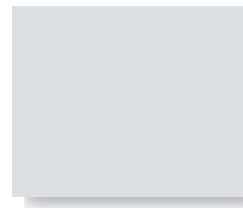
Copyright 2015, Metal Roof Innovations, Ltd. S-5! products are patent protected.
S-5! aggressively protects its patents, trademarks, and copyrights. Version 052115.

Distributed by



DynaClad®

PVDF Color Chart



WHITE
SRI = 85



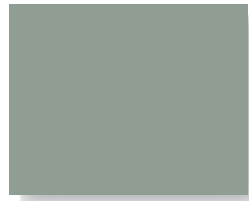
COBALT BLUE
SRI = 20



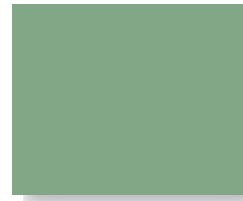
PUTTY
SRI = 77



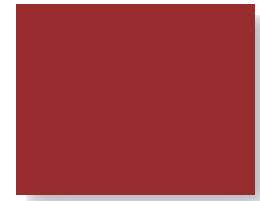
SANDSTONE
SRI = 77



DOVE GREY
SRI = 61



PATINA COPPER
SRI = 58



BRITE RED*
SRI = 44



BEIGE
SRI = 53



STONE
SRI = 49



SLATE GREY
SRI = 47



TERRA COTTA
SRI = 43



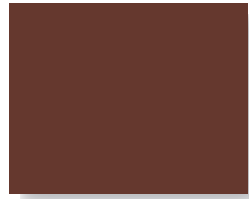
METALLIC SILVER
SRI = 53



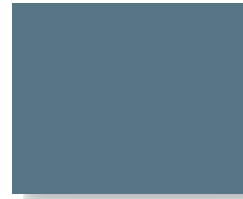
MUSKET GREY
SRI = 35



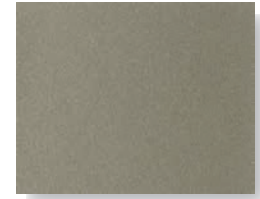
SEAPORT
SRI = 35



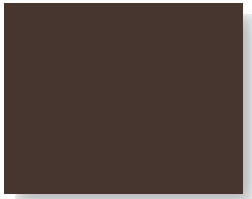
COLONIAL RED
SRI = 34



SLATE BLUE
SRI = 34



CHAMPAGNE
SRI = 51



BURGUNDY
SRI = 34



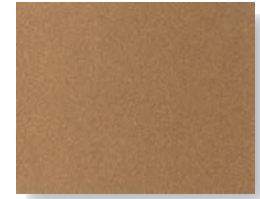
HEMLOCK GREEN
SRI = 31



LEAF GREEN
SRI = 31



CHARCOAL GREY
SRI = 31



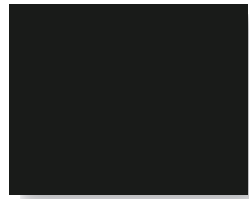
METALLIC COPPER
SRI = 49



SPARTAN BRONZE
SRI = 30



CLASSIC BRONZE
SRI = 29



MATTE BLACK
SRI = 29



EVERGREEN
SRI = 28



AGED COPPER
SRI = 43



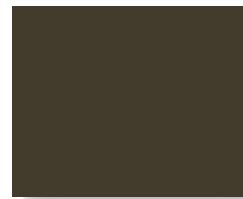
DARK BRONZE
SRI = 27



ROYAL BLUE
SRI = 27



HARTFORD GREEN
SRI = 26



BROWN
SRI = 25



WEATHERED ZINC
SRI = 37

† Metallic Colors †

Premium Colors **

† Metallic colors are directionally sensitive and therefore entire roof areas should be ordered at one time to ensure color uniformity.

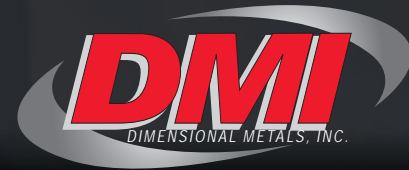
*Brite Red has a clear coat. ** Premium colors carry an upcharge. SRI = Solar Reflectance Index.

Colors shown are samples and may vary slightly from actual material.

CUSTOM COLORS ARE AVAILABLE

PROVEN. DEPENDABLE. SUSTAINABLE.

METAL ENVELOPE SYSTEMS SINCE 1988



800.828.1510

www.dmmetals.com

sales@dmmetals.com

PRODUCT - DynaClad® Prefinished Architectural Tension Levelled Coil and Flat Sheet is coated with a 70% Full Strength PVDF Paint Finish. The top side is coated with a polyester primer and a 70% full strength PVDF topcoat for a total mil thickness of 1.1 (± .1). The reverse side is a polyester primer and a polyester topcoat with a total dry film thickness of .55 (± .1).

Substrates

Galvalume®

Consists of aluminum-zinc alloy coated (55% aluminum, 43.4% zinc, 1.6% silicon, nominal percentage by weight) carbon steel of commercial weight meeting ASTM 792.

HDG-90

Consists of hot-dipped galvanized steel base sheet of commercial weight (AISI G90 designation) meeting ASTM A653.

Aluminum

Consists of 3003/3105 H14 alloy aluminum base sheet of commercial weight meeting ASTM B209.

Stocked substrates are produced from 48" wide coil. Standard sized flat sheets are 48" X 120". Custom sized flat sheets can be produced in various widths and lengths with extended lead times and additional costs.

WARRANTY - A finish warranty covering color fade, chalking, and film integrity as well as a perforation warranty (Galvalume® only) covering base sheet integrity is available at no additional cost.

DYNACLAD® STOCKING COLOR/MATERIAL						
COLOR (IN ALPHABETICAL ORDER)	24 GAGE GALVALUME KYNAR 500	22 GAGE GALVALUME KYNAR 500	.032 ALUM. 3003/3105 H14 KYNAR 500	.040 ALUM. 3003/3105 H14 KYNAR 500	.050 ALUM. 3003/3105 H14 KYNAR 500	.063 ALUM. 3003/3105 H14 KYNAR 500
AGED COPPER	•		•			
BEIGE	•	•	•	•	•	
BRITE RED	•		•	•		
BROWN	•		•	•		
BURGUNDY	•		•			
CHAMPAGNE	•		•			
CHARCOAL GREY	•		•	•		
CLASSIC BRONZE	•		•	•		
COBALT BLUE	•		•			
COLONIAL RED	•		•			
DARK BRONZE	•	•	•	•	•	•
DOVE GREY	•	•	•	•		
EVERGREEN	•		•	•		
HARTFORD GREEN	•		•			
HEMLOCK GREEN	•		•			
LEAF GREEN	•		•			
MATTE BLACK	•		•	•		
METALLIC COPPER	•		•			
METALLIC SILVER	•		•			
MUSKET GREY	•		•	•		
PATINA COPPER	•		•	•		
PUTTY	•	•	•	•	•	
ROYAL BLUE	•		•	•		
SANDSTONE	•	•	•	•		
SEAPORT	•		•			
SLATE BLUE	•		•			
SLATE GREY	•	•	•	•	•	
SPARTAN BRONZE	•		•	•		
STONE	•		•	•		
TERRA COTTA	•		•			
WEATHERED ZINC	•		•			
WHITE	•	•	•	•	•	•

COLORS LISTED ABOVE ARE AVAILABLE ON ANY OF THE SUBSTRATES BUT WILL HAVE ADDITIONAL LEAD TIMES AND COST.

STOCKED NON-PAINTED MATERIAL

HDG-90 24 ga, 22 ga, 20 ga, 18 ga, and 16 ga

ACRYLUME® 24 ga and 22 ga

MILL FINISHED ALUMINUM .032, .040, .050, and .063

CLEAR ANODIZED ALUMINUM .032 and .040

COPPER 16 oz. and 20 oz.

RHEINZINK® .7 mm, .8 mm, and 1.0 mm

STAINLESS STEEL TYPE 304 24 ga and 22 ga

DynaClad® is a registered trademark of Dimensional Metals, Inc.

Fluoropon® is a registered trademark of Sherwin-Williams.

Galvalume® is a registered trademark of BIEC International Inc. and some of its licensed partners.

Acrylume® is a registered trademark of USIC.

PERFORMANCE SPECIFICATION

ABRASION RESISTANCE (ASTM D968)

Passed 80 Liters

ACCELERATED WEATHERING (ASTM D4587, G154)

5,000 hours with no chalking, blistering or loss of adhesion

CHEMICAL RESISTANCE (ASTM E1308)

No visible changes

ADHESION (ASTM D3359)

No coating removed

COLOR CHANGE (ASTM D2244)

After 2,000 hours color change less than 2 NBS units

FLAME TEST (ASTM E84)

Class A

FLORIDA EXTERIOR DURABILITY (ASTM G7, E2244 & D4214)

Less than 5 Δ units color change and chalk rating of less than 8

FORMABILITY / T BEND (ASTM D522 & D4145)

No adhesion loss on a 1/8" Mandrel and 2T bend

GLOSS (ASTM D523)

30% (±5%) at 60 degrees

55% (±5%) at 85 degrees

HUMIDITY (ASTM D2247)

2,000 hours Galvalume® and G-90

3,000 hours Aluminum

IMPACT (ASTM D2794)

No cracking or loss of adhesion

PENCIL HARDNESS (ASTM D3363)

HB Minimum

SALT SPRAY (ASTM B117)

No blisters or adhesion loss after 2,000 hours for Galvalume® & G-90

No blisters or adhesion loss after 3,000 hours for Aluminum

CYCLIC SALT FOG (ASTM D5894)

Acceptance

See dmmetals.com for test reports, thermal emittance, and SR values.



PROUDLY FINISHED WITH
SHERWIN-WILLIAMS
Coil Coatings



2020-01



DYNACLAD® KYNAR 500® COATING 20 Year Limited Warranty

Dimensional Metals, Inc. (DMI) warrants for a period of twenty (20) years after Customer's shipment of painted products that Dimensional Metal's standard color, Medium Gloss DynaClad® coil coatings (Coatings) when applied on Galvalume, HDG-90 steel and aluminum substrate will not:

- A. Peel, flake or otherwise lose adhesion to an extent that is apparent on ordinary outdoor visual observation.
- B. Change color more than 5 Delta E Units when measured per ASTM D-2244 on clean surface.
- C. Chalk more than a number eight (8) rating when measured per ASTM D-4214.

TERMS AND CONDITIONS

1. It is acknowledged that fading or color change may not be uniform if the surfaces are not equally exposed to the sun and elements. DMI recommends that there be a systematic fresh water rinse maintenance program in effect in areas of high salt concentration (such as adjacent to the seashore and/or industrial atmospheres) so as to prevent the accumulation of concentrated mineral deposits.
2. This Limited Warranty covers DMI Coatings exposed to normal atmospheric conditions and specifically excludes corrosive or aggressive atmospheres including direct salt spray, contact with animal or animal waste. This Limited Warranty shall not apply where coating failure is the result of physical damage resulting from fabrication or embossing operations, corrosion due to cut edge exposure, salt spray, acts of God, vandalism, any negligent acts of the Customer including, but not limited to, improper packaging, storage, shipping, or, installation which prohibit proper drainage of standing water or other such occurrences beyond DMI's control.
3. DMI's liability and the Customer's exclusive remedy for any breach of this Limited Warranty or failure of the Coatings is strictly limited to the direct cost of refinishing or replacing the failed coated metal. Refinishing of the failed coated metal shall be performed by using standard finishing practices and materials. DMI will, in all instances, be the sole judge as to whether refinishing or replacement of the failed areas is required to fulfill its obligation under this Limited Warranty and reserves the right to approve and negotiate the contract.
4. This Limited Warranty shall not be extended by the refinishing or replacement of the coated material, but the remaining warranty period shall continue in effect and be applicable to the refinished or replaced areas under the terms and conditions of the Limited Warranty.
5. Claims under this Limited Warranty must be presented in writing during the warranty period and within sixty (60) days after Customer becomes aware that any warranted condition has occurred. Time is of the essence and failure to give notice within the specified time shall discharge DMI from any obligations under this Limited Warranty. DMI must be given a reasonable opportunity to an on-site inspection to determine the cause and the corrective action to be taken if it is determined to be a Coating failure.
6. THIS LIMITED WARRANTY IS GIVEN AS THE EXCLUSIVE WARRANTY AND REMEDY, AND DMI DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, DMI SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE CUSTOMER'S EXCLUSIVE REMEDY SHALL BE THAT SET FORTH IN PARAGRAPH 3 FOR ANY CLAIM OF LIABILITY RELATING TO THE COATINGS UNDER NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY, OR ANY OTHER LEGAL THEORY.
7. This Limited Warranty is extended to Customer alone, is nontransferable and non-assignable, and may not be modified or enlarged in its scope by any representative, salesman, agent, or other employee of DMI. Customer shall not permit anyone to claim or imply that this Limited Warranty extends to anyone other than Customer. This condition is a material term of this Limited Warranty and its violation by Customer or its agents or representatives shall release DMI from its obligations hereunder.

This Limited Warranty shall be governed by and interpreted in accordance with the laws of the State of Ohio. Jurisdiction and venue for any dispute concerning the roof or this Limited Warranty are fixed in Franklin County, Ohio.

Project Name

Sold To

Address

Address

City

State

Zip

City

State

Zip

Material Description

Invoice/ (Order Number)

Effective Date

Dimensional Metals, Inc.

58 Klema Drive North - Reynoldsburg, OH 43068 - (740) 927-3633

Signature

Title

Date

Kynar 500® is a registered trademark of Atochem of North America. Hylar 5000® is a registered trademark of Ausimont USA, Inc. DYNACLAD® is a registered trademark of Dimensional Metals, Inc.



GALVALUME SHEET 20 YEAR-6 MONTH LIMITED WARRANTY

EXCLUSIVE WARRANTY

Dimensional Metals, Inc., 58 Klema Drive North, Reynoldsburg, Ohio 43068 ("seller") hereby provides the LIMITED WARRANTY to: _____ ("Buyer"). Dimensional Metals, Inc. Warrants that, subject to the following provisions, Seller's hot dipped aluminum-zinc alloy-coated Galvalume sheet steel sold for use as steel building, roofing and siding panels, if erected within the Continental United States, WILL NOT rupture, fail structurally, or perforate within a period of 20 years and 6 months after shipment from our facility due to exposure to normal atmospheric conditions.

EXCLUDED ATMOSPHERIC CONDITIONS

This limited warranty DOES NOT APPLY to sheets exposed at any time to corrosive or aggressive atmospheric conditions, including but not limited to:

1. Areas subject to salt-water marine atmospheres or to constant spraying of either salt or fresh water.
2. Areas subject to fallout or exposure to corrosive chemicals, fumes, ash, cement dust or animal waste.
3. Areas subject to water run-off from lead or copper flashings or areas in metallic contact with lead or copper.
4. Conditions/circumstances where corrosive fumes or condensates are generated or released inside the building.

OTHER EXCLUDED SITUATIONS

This warranty DOES NOT APPLY in the event of:

1. Bends less than 2T for sheet thickness 0.030" and thinner and less than 4T for sheet thickness 0.031" and thicker.
2. Slopes of the roof or sections of the roof flatter than 1/4:12.
3. Mechanical, chemical, or other damage sustained during shipment, storage, forming, fabrication, or during or after erection.
4. Forming which incorporates severe reverse bending or which subjects coating to alternate compression and tension.
5. Failure to provide free drainage of water, including internal condensation, from overlaps and all other surfaces of the sheets or panels.
6. Failure to remove debris from overlaps and all other surfaces of the sheets or panels.
7. Damage caused to the metallic coating by improper roll forming, scouring or cleaning procedures.
8. Deterioration of the panels caused by contact with green or wet lumber or wet storage stain caused by water damage or condensation.
9. Presence of damp insulation or other corrosive materials in contact with or close proximity to the panel.
10. This warranty does not apply in the event of deterioration to the panels caused directly or indirectly by panel contact with fasteners. Selection of suitable long-lasting fasteners to be used with Galvalume roofing and siding panels rests solely with the Buyer.

EXCLUSIVE REMEDIES

Buyer's exclusive remedy and Seller's sole liability for breach of this limited warranty shall be limited exclusively to the cost of either repairing nonconforming panels, or at Seller's sole option, of furnishing FOB buyer's plant sufficient sheet product to enable Buyer to fabricate replacement panels for the nonconforming panels.

LIMITATION OF DAMAGES

THE LIABILITY OF THE SELLER SHALL NOT EXTEND TO PERSONAL INJURY, PROPERTY DAMAGE, LOSS OF PROFIT, DELAY OR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FAILURE OF ANY SHEET TO CONFORM WITH THE PROVISIONS OF THIS LIMITED WARRANTY.

OTHER WARRANTIES, INCLUDING MERCHANTABILITY

THERE ARE NO WARRANTIES, PROMISES OR AFFIRMATIONS OF FACT, INCLUDING WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE OTHER THAN THOSE EXPRESSLY SET FORTH HEREIN. THE CONDITIONS OF LIABILITY, RIGHTS, OBLIGATIONS AND REMEDIES OF THE PARTIES RELATING TO CLAIMS ARISING FROM ANY NONCONFORMING SHEET SHALL BE GOVERNED EXCLUSIVELY BY THE TERMS SET FORTH HEREIN.

INSPECTIONS AND NOTICE OF CLAIM

Buyer shall exercise diligence in inspection of material as received from Seller prior to utilization so as to mitigate expense involved in repairing, repainting, or replacing nonconforming sheets. Claims for any breach of warranty must be made within the period of this limited warranty and within 30 days after Buyer discovered the nonconforming sheet, and Buyer must give Seller a reasonable opportunity to inspect the material.

DUTIES OF BUYER IN PRESENTING CLAIMS

As a condition precedent to Seller's liability hereunder, Buyer must present with his claim such records so to enable Seller and the date of installation in the form of building panels for the claimed nonconforming sheet. Buyer shall also present such evidence that establishes any claimed nonconformance was due to a breach of the limited warranty stated herein.

TRANSFERS REPRESENTATIONS AND ASSIGNMENTS

UNLESS EXPRESSLY AGREED IN WRITING BY AND BETWEEN BUYER AND SELLER, THIS LIMITED WARRANTY IS EXTENDED TO BUYER AS THE ORIGINAL PURCHASER FROM SELLER AND IS NON-TRANSFERABLE AND BY ANY PURPORTED TRANSFER OR ASSIGNMENT, NOR SHALL ANY RIGHT AGAINST SELLER SURVIVE ANY TRANSFER OR ASSIGNMENT. BUYER OR ITS AGENTS OR REPRESENTATIVES SHALL NOT CLAIM, REPRESENT OR IMPLY NOR PERMIT ITS CUSTOMERS, DISTRIBUTORS, APPLICATORS, OR CONTRACTORS TO CLAIM, REPRESENT OR IMPLY THAT THIS LIMITED WARRANTY EXTENDS OR IS AVAILABLE TO PARTIES OTHER SHALL CAUSE ANY PARTY TO CEASE AND DESIST IN ANY SUCH MISREPRESENTATIONS. THIS CONDITION SHALL CONSTITUTE A MATERIAL TERM OF THIS LIMITED WARRANTY AND ITS VIOLATION BY BUYER SHALL EXCUSE SELLER FROM ITS OBLIGATIONS HEREUNDER.

WAIVER OR MODIFICATIONS OF SELLER'S RIGHTS

No terms or conditions, other than those stated herein, and no agreement or understanding, oral or written, and no course of conduct or performance, in any way purporting to modify this limited warranty or to waive Seller's rights hereunder, shall be binding on Seller unless the same be clearly set forth in a writing that expressly refers to this limited warranty and expressly refers to having such effect upon this limited warranty is signed by the authorized representative of Seller.

TERMINATION

Seller reserves the right to terminate this limited warranty, except with respect to orders, which it has already accepted, upon the giving of written notice thereof.

GOVERNING LAW

The substantive law of the State of Ohio shall of exclusively govern the rights and duties of the parties under this agreement.

ENTIRE AGREEMENT

The provisions set forth herein are in lieu of and expressly supersede any other provisions irrespective of where contained. All proposals, negotiations and representations, if any, made prior to or with reference hereto are merged herein.

Signature	Title	Date
Dimensional Metals, Inc.		



DynaClad® Metal Roofing System

XX Year Limited Warranty

LITHO IN U.S.A.

Dimensional Metals, Inc. (hereinafter referred to as "DMI") warrants to the named building owner (hereinafter referred to as "owner") that subject to all term(s), condition(s), limitation(s), allocation(s) of warranty, and responsibility(ies) stated herein, the installers workmanship on the named building will be adequate to prevent leaks for xx years from the date of completion of the metal roof system installation. This includes all materials supplied by DMI including but not limited to insulation, felt underlayment, ice and water underlayment, vapor barrier and fasteners. The installer is solely responsible for any leaks arising during the first two years after completion of the installation and DMI is responsible for any leaks first arising after the second anniversary of successful completion of the installation of the subject roof but arising not later than xxth anniversary of such completion. This warranty will be fully satisfied by repair of the roof, and any such repairs shall carry a warranty against leaks only for any then remaining balance of the original xx year warranty period.

DMI's aggregate total cumulative liability under this warranty is limited to the dollar amount of the original materials furnished by DMI only and the installation of those materials only.

DMI MAKES NO OTHER WARRANTY EITHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE WHICH EXCEED OR DIFFER FROM THE WARRANTIES HEREIN EXPRESSED ARE DISCLAIMED AND EXCLUDED FROM THIS WARRANTY. DMI DOES NOT IN ANY WAY WARRANT THE MERCHANTABILITY OF THE GOODS SOLD HEREBY. NO WARRANTIES EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF INCLUDING TERMS, CONDITIONS, AND LIMITATIONS LISTED.

Roof Completion Date - _____

XXXXXXX

Building/Project Name

XXXXXXX

Building Address

City

State

XXXXXXX

Building Owners Name

XXXXXXX

Owners Address

City

State

1. Owner shall provide DMI with written notice within thirty (30) days of the discovery of any leaks in the roof. Failure of the owner to do so shall relieve both DMI of any and all responsibility and/or liability under this warranty.
 2. DMI shall not have any liability or responsibility under or in connection with either this warranty or the roof, if any one or more of the following shall occur:
 - a. Deterioration caused by marine atmosphere or regular spray of salt water.
 - b. Corrosion caused by heavy fallout or exposure to any corrosive chemicals, ash or fumes from any type of manufacturing facility.
 - c. Deterioration caused by any corrosive substance or any condensation of any harmful substance contained, generated or released inside the building.
 - d. Damage caused by owner's agents, employees or any other third party not under the direct control and supervision of DMI and/or installer on the roof.
 - e. Damage caused by natural disasters, including, but not limited to lightning, any strong gale, hurricane, tornado, or earthquake.
 - f. Damage caused by any panels or other components installed in a manner that does not permit drainage of water from all surfaces or have a slope of less than 1/4" per foot.
 - g. Damage caused, after installation of the roof system by the installer, resulting from any alterations, such as, but not limited to, structures, fixtures, or utilities being placed upon or attached to the roof without prior written authorization from DMI.
 - h. Corrosion to the underside of the roof system which is or was caused at any time in part or wholly by any condensation resulting from either or both of the following; the use of inadequate vapor barrier where insulation is installed immediately beneath the roof panels. (An adequate vapor barrier must have a perm rating of .05 or less with sealed joints and perimeter) or inadequate ventilation of the attic space between roof panel and insulation.
 - i. If there is any failure by the owner or occupant or user to use reasonable care in maintaining the roof.
 - j. If the owner fails to comply with every term and/or condition stated in this Limited Warranty.
 - k. Any other cause beyond DMI's control, including but not limited to acts of war, terrorism or civil disobedience.
 3. DMI shall not have any liability or responsibility under or in connection with either this Limited Warranty or the roof in the event of a failure by any contractor or subcontractor to use approved installation methods and details indicated in approved shop drawing details furnished by DMI, [or to substitute therefore only products approved in writing in advance by DMI as equal (if provided by the contractor or subcontractor)].
 4. DMI shall not have any obligation under this Limited Warranty until final shop drawings of the projects roof are submitted by DMI to the installer and accepted in writing by the installer, architect, general contractor and DMI. Shop drawings must show the exact number, size and location of all roof penetrations and roof top equipment.
 5. DMI shall not have any obligation under this Limited Warranty until all invoices for installation, supplies, materials, and services have been paid in full to both DMI and installer.
 6. DMI shall not be responsible for any consequential damage or loss to the building, its contents or other materials.
 7. In no event shall DMI have any liability for any commercial loss, claims for labor, or consequential damages of any other type, whether owner's claim be based in contract, tort, warranty, strict liability, or otherwise, it is expressly agreed that owners remedies expressed in this Limited Warranty are owners exclusive remedies.
 8. DMI's failure at any time to enforce any of the terms and conditions stated herein shall not be construed to be a waiver of such provisions or of the right to exercise any right in the future.
 9. During the term of this warranty, DMI, its sales representatives and employees, shall have free access to the roof during regular business hours.
- This Limited Warranty is tendered for the sole benefit of the original purchaser as named below and is not transferable or assignable. It becomes valid only when signed by DMI.
- This Limited Warranty may not be changed orally.
- THIS LIMITED WARRANTY SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF OHIO. JURISDICTION AND VENUE FOR ANY DISPUTE CONCERNING THE ROOF OR THIS LIMITED WARRANTY ARE FIXED IN FRANKLIN COUNTY, OHIO.
- Installing Contractor
- _____
Signature Title Date
- Building Owner
- _____
Signature Title Date
- Dimensional Metals, Inc.
58 Klema Drive North - Reynoldsburg, OH 43068
(740) 927-3633
- _____
Signature Title Date



SUBSTITUTION REQUEST

(During the Bidding/Negotiating Stage)

Project: FY 23-24 New Welcome Center

Substitution Request Number:

From: Saniflow Corp. / Attn: Samantha Layedra

4401 Fort Loramie-swanders Rd, Minster, OH, 45865-9306

Date: 11/22/2023

A/E Project Number: #22009

To: Feinknopf Macioce Schappa Architects

Re: Substitution/ Equal

Contract

Specification Title: TOILET ACCESSORIES

Description: HORIZONTAL DIAPER CHANGING STATIONS

Paragraph: 2.07

Section: 102800

Page: 3

Proposed Substitution: Babymedi

Manufacturer: Saniflow Corp. Address: 3325 NW 70th Ave., Miami FL, 33122 Phone: 305-424-2433

Trade Name: Saniflow, a Mediclinics Company Model No.: CP0016HCS-ASTM

Attached data includes product description, specifications, drawings, photographs, and performance and test data adequate for evaluation of the request; applicable portions of the data are clearly identified.

Attached data also includes a description of changes to the Contract Documents that the proposed substitution will require for its proper installation.

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.

Submitted by: Samantha Layedra

Signed by: Samantha Layedra

Firm: Saniflow Corp

Address: 3325 NW 70th Ave, Miami, FL, 33122

Telephone: 305-424-2433 x. 2021

A/E's REVIEW AND ACTION

- ☐ Substitution approved - Make submittal in accordance with Specification Section 01 25 00 Substitution Procedures.
- ☐ Substitution approved as noted - Make submittal in accordance with Specification Section 01 25 00 Substitution Procedures.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed by:

Date:

Supporting Data Attached: ☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☒ Reports ☐ _____

Changing diapers has never been safer, more hygienic and comfortable. **BABYMEDI®**, freedom to leave home.



CP0016H-ASTM
Material: polypropylene
Finish: white



CP0016HCS-ASTM
Material: polypropylene / stainless steel AISI 304
Finish: satin

For maximum safety, it is recommended to install according to manufacturer's instructions.

Safety

- Robust. Supports loads up to 220 lb.⁽¹⁾
- Sturdy and very firm. No deflection.
- Nylon protection straps with quick fixing fastener.
- Certified according to the European safety standards EN 12221-1 and EN 12221-2 and the American standard ASTM F2285-04

Hygiene

- Biocote® antimicrobial additive embedded onto its surface, inhibiting the spread of viruses and bacteria and reducing the risk of cross-contamination.
- Easy to clean with its smooth-textured surface, seamless, and rounded corners.
- Bed liner dispenser holds capacity of approximately 80 liners.

Comfort

- Spacious. 295 sq in. to get your baby comfortably changed.
- Seamless, harmless to the baby.
- Comes with 2 hooks to hang diaper handbags or other personal belongings.

Durability

- Concealed opening mechanism consisting of 2 steel hinges and a pneumatic cylinder that guarantees smooth opening and great durability.
- Steel Wall mounting chassis with cataphoresis treatment.

Design

- Ergonomic. Babymedi® can be opened and closed with a single hand for a hassle free experience.
- Modern, smart, and comfortable curves for pleasant use.
- AISI 304 Stainless steel finish for perfect integration in any bathroom spaces.

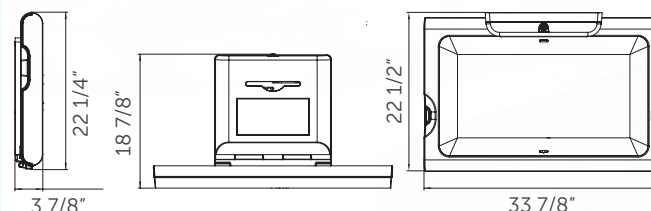
(1) Ensure that the suitable wall-mounting elements are used and that unit is properly installed according to manufacturer's guidelines.



TECHNICAL SPECIFICATIONS		
Dimensions	CP0016H and CP0016HCS	L: 33 7/8" x W: 3 7/8" (closed) / 22 1/2" (open) x H: 18 7/8"
Plastic parts thickness	1/8" - 1/4"	
Mounting-chassis thickness	1/8"	
Frontal chassis thickness ⁽²⁾	0.03"	
Recommended installation Height	31 1/2"	
Recommended installation Height ⁽²⁾	27 1/2"	

⁽²⁾ Only CP0016HCS

CP0016H - CP0016HCS





babymedi 



Comparison	BabyMedi®	Koala Kare
Item No.	CP0016HCS-ASTM	KB110-SSWM
Materials	Bacteria-resistant Polypropylene Plastic and Stainless Steel exterior	Polypropylene Plastic and Stainless Steel exterior
Antimicrobial	Biocote® additive, based on ion silver technology embedded into surface	Microban additive into the bed surface
Dimensions	33 7/8" W x 18 7/8" H Depth while open: 22 1/2" Closed: 3 7/8"	35 1/4" W x 20" H Depth while open: 19" Closed: 4"
Weight	35.3 lb	46 lbs
Finishes	AISI 304 Satin Stainless Steel Cover Finish	AISI 304 Satin Stainless Steel Cover Finish
Liner dispenser capacity	80 units	15 units
Maximum support	220lbs	200lbs
Price Comparison	\$690	\$1,778.81
Features	2 Bag hooks Nylon safety straps	2 Bag hooks Nylon safety straps
ADA surface mounted	Yes	Yes
Warranty	5-year limited warranty	5-year limited warranty
Certifications	ASTM F2285-04, EN 12221-1, EN 12221-2	ASTM F2285-04, ASTM G21
BabyMedi® changing stations offer a very high level of safety and cleanliness being the ideal solution for public spaces with models suitable for high traffic facilities providing high strength and durability.		

CP0016H-ASTM / CP0016HCS-ASTM / CP0016HCSB-ASTM

General Description

- Surface-mounted baby changing stations made of bacterial-resistant polypropylene and with stainless steel AISI 304 exterior (CP0016HCS-ASTM and CP0016HCSB-ASTM).
- High level of safety and cleanliness.
- Models offer great strength and durability, suitable for high traffic facilities.
- Trendy and stylish design.
- Biocote® antimicrobial additive into its own surface.
- Includes a pair of bag hooks to keep personal belongings close and at hand.
- Fully comply with the American standard ASTM F2285-04 and the European EN 12221-1 and EN 12221-2 standards.

Components & Materials

- **CP0016H:** surface-mounted baby changing station made of polypropylene in white finish.
- **CP0016HCS:** surface-mounted baby changing station made of polypropylene and with a stainless steel AISI 304 exterior, in satin finish.
- **CP0016HCSB:** surface-mounted baby changing station made of polypropylene and with a stainless steel AISI 304 exterior, in black finish.
- **BED:** with approximately 295 in² contoured changing surface area is made of polypropylene in white finish Biocote® antimicrobial additive embedded into its surface, promoting easy cleaning and reducing the growth of odor-causing and staining microbes.
- **LINER DISPENSER:** is made of polypropylene and holds approximately 80 bed liners, minimizing operator refills and discouraging potential vandalism.
- **OPEN/CLOSE MECHANISM:** concealed from the user's view, it consists of a pair of reinforced hinges and a pneumatic cylinder, ensuring high durability and a smooth opening and closing of the baby changing station.
- **MOUNTING CHASSIS:** made of steel with a cathaphoresis treatment. The corresponding mounting hardware is supplied, making the unit installation to the wall easy.
- **FRONTAL CHASSIS:** (CP0016HCS / CP0016HCSB) made of one-piece AISI stainless steel, 1/32" thick, fixed to the bottom of the bed by means of 4 bolts and 4 nuts, always concealed from the user's view, without joints or edges to ensure the user's safety, a better cleaning and a seamless blending with other satin finish accessories in the washroom.

Technical Specifications

Dimensions	L: 33 7/8" x W: 3 7/8" (closed) / 22 1/2" (open) x H: 18 7/8"
Weight (empty)	27.12 lb (CP0016H) 35.3 lb (CP0016HCS / CP0016HCSB)
Liner dispenser capacity	80 units
Recommended installation height	31 1/2" at lowest point
Recommended installation height (handicapped)	27 1/2" at lowest point

Operation

Open the BabyMedi® baby changing station. Place the baby on the centre of the bed and change your baby's diapers. Close the BabyMedi® station.

Under no circumstance should the baby be left unattended at any time on top of the baby changing station in order to avoid injury from falling or slipping.

Please mark the selected item

☐


code

CP0016H-ASTM

material

polypropylene
finish
white


☐


code

CP0016HCS-ASTM

material

polypropylene /
stainless steel
finish
white / satin


☐


code

CP0016HCSB-ASTM

material

polypropylene /
stainless steel
finish
white / black



Installation

According to the installation and safety instructions manual supplied with the unit.

IMPORTANT: in order to ensure BabyMedi is properly installed it is recommended that a qualified person carries out the installation of the unit. The unit must be properly installed on a wall that is able to sustain a considerable weight and can accommodate the supplied installation hardware.

Certificates & Qualifications

Unit shall be ASTM approved, according F2285-04 standard and GS according EN 12221-1 and EN 12221-2 standards.

Ideal location

Public spaces such as, shopping centers, airports, public buildings, childcare centers, etc. Models suitable for high traffic facilities with high strength and durability.

IMPORTANT: the Congress of the United has taken a further step towards gender equality by implementing law 114-235 (10/07/2016). By this law, the American Government states that restrooms, both for men and women, in public buildings all around the country, must have diaper changing facilities in place.

Guide specification

Surface-mounted baby changing stations made of bacterial-resistant polypropylene (CP0016H, CP0016HCS and CP0016HCSB) and with stainless steel AISI 304 exterior (CP0016HCS and CP0016HCSB).

BabyMedi® changing stations offer a very high level of safety and cleanliness being the ideal solution for public spaces such as, shopping centers, airports, public buildings, childcare centers, etc. Models are suitable for high traffic facilities where great strength and durability is needed.

Their trendy and stylish design, allow these baby changing stations to blend into any space perfectly.

Biocote® antimicrobial additive, based on ion silver technology, is embedded into the surface, promoting an easy cleaning and reducing the growth of odor causing and staining microbes.

BabyMedi® baby changing stations are supplied with child protection straps made of nylon assembled.

A pair of bag hooks (one at the right side and the other one at the left) help to keep personal belongings close and at hand.

BabyMedi® units fully compliant with the American standard ASTM F2285-04 and the European EN 12221-1 and EN 12221-2 standards that require baby changing stations be able to support a 110 lb static load test during one hour. Moreover, units tested in our own laboratories have withstood loads over 220 lb.

Overall dimensions:

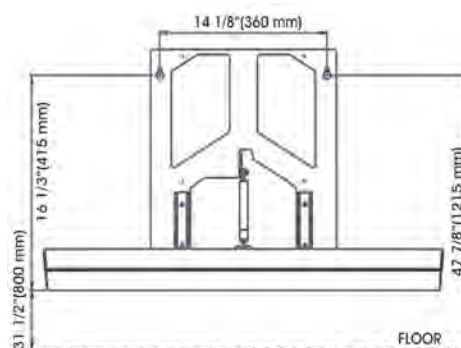
L:33 7/8" x W:3 7/8" (closed)/ 22 1/2" (open) x H:18 7/8"

Weight: 27.12 Lbs. (CP0016H) / 35.3 Lbs. (CP0016HCS and CP0016HCSB)

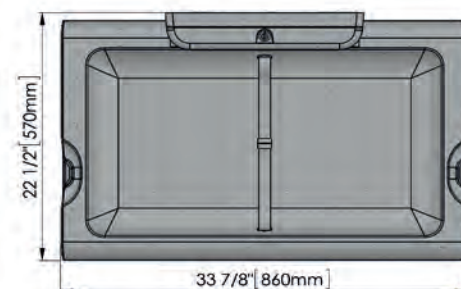
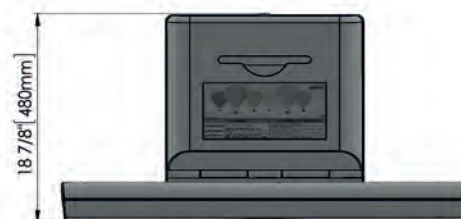
Recommended heights from floor

	Male	Female	Disabled
x To bottom of unit	31 1/2" (800 mm)	31 1/2" (800 mm)	27 1/2" (700 mm)
y To mounting brackets	16 3/8" (415 mm)	16 3/8" (415 mm)	12 13/32" (315 mm)

MOUNTING



CP0016H-ASTM / CP0016HCS-ASTM /
CP0016HCSB-ASTM



Job:

Model number:

Variations:

Architect / Engineer:

Contractor:

Customer / Wholesaler:

City / State / Country:

Date:

Quantity:

Saniflow Corp reserves the right to make changes and/or modifications to the products and their specifications without warning or notice.

For further info please contact SANIFLOW on: Toll free: **1-877-222-9125** or visit our website at **www.saniflowcorp.com**

Tel: +1 (305) 424 2433 Fax: +1 (305) 424 2435 · **sales@saniflowcorp.com**

babymedi®



baby changing stations



Babymedi® baby changing stations are made of polypropylene that incorporates a BioCote® antimicrobial additive, allowing an easy cleaning and minimizing the growth of microbes, which are a source of diseases, odors and stains.

The diaper changing station comes with an adjustable safety belt with quick fastening. In addition to this, it has two hooks for hanging diaper bags, handbags and other articles that you might want to keep at hand.

All BabyMedi ® baby changing stations have a bed liner dispenser with a capacity of approximately 80 bed liners, which cuts down the number of refills. The opening/closing mechanism of the baby changing unit is always concealed to the user's view.

The chassis for mounting the baby changing station on the wall is made of steel with a cathaphoresis treatment that makes it very robust against corrosion.



babymedi[®]



SUBSTITUTION REQUEST FORM

We hereby submit for your consideration the following product instead of the specified item for the following project:

PROJECT: LAKE LOHRANIG STATE PARK WELCOME CENTER PROJECT NO. DNR-230014.02
CDNR-FY23-24

DRAWING NO. A-5 DRAWING NAME ROOF PLAN

SPEC. SECT.	SPEC. NAME	PARAGRAPH	SPECIFIED ITEM
<u>074113.16</u>	<u>STANDING SEAM METAL ROOF</u>	<u>2.2</u>	<u>VERTICAL RIB, SEAMED JOINT</u> <u>STANDING SEAM ROOF PANELS</u>

Proposed Substitution: 18" MP 200 PANEL

Attach complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

Submit, with request, all necessary samples and substantiating data to prove equal quality and performance to that which is specified. Clearly mark manufacturer's literature to indicate equality in performance.

Substitutions of the materials and equipment described in the Contract Documents will be considered during the bidding period upon receipt of a written request to the Design Professional for approval prior to the date set for receipt of bids as described in Section 00 74 13, Project Requirements.

CERTIFICATION OF EQUAL PERFORMANCE AND ASSUMPTION OF LIABILITY FOR EQUAL PERFORMANCE

The undersigned states that the function, appearance, and quality are equivalent or superior to the specified item.

Submitted by:

Signature

Joe Farris

SR ESTIMATOR
Title

Firm

METAL PANEL SYSTEMS

Address

11401 Rockfield Court, Cincinnati, OH 45241

Telephone

513-341-1166

FAX Number

Date

12/4/23

Signature shall be by person having authority to legally bind his firm to the above terms. Failure to provide legally binding signature will result in retraction of approval.

For Use by Design Professional:

☒ Recommended ☐ Not Recommended as Noted

☐ Recommended ☐ Received Too Late

Signed By Joseph V. Pax AIA / FMS

Date 12/08/2023

For Use by Owner's Representative or Owner:

☐ Accepted ☐ Accepted as Noted

☐ Not Accepted ☐ Received Too Late

Signed By

Date

Fill in Blanks Below:

- A. Does the substitution affect dimensions shown on Drawings? Yes _____ No ☒
If yes, clearly indicate changes: _____
- B. Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the requested substitution? Yes _____ No ☒
If no, fully explain: NO CHANGES REQUIRED
- C. What effect does substitution have on other Contracts or other trades?
NONE, OTHER THAN FASTER LEAD TIMES
- D. What effect does substitution have on construction schedule?
PRODUCT AVAILABILITY - FASTER LEAD TIMES
- E. Manufacturer's warranties of the proposed and specified items are:
☒ Same _____ Different (Explain on Attachment)
- F. Reason for Request: CONTRACTOR REQUEST MATERIAL QUOTES, SAME / LIKE MATERIALS
- G. Itemized comparison of specified item(s) with the proposed substitution.
List significant variations: NO VARIATIONS
- H. Accurate cost data comparing proposed substitution with product specified:
19-20% LESS THAN BERRIDGE
- I. Designation of maintenance services and sources: N/A

(ATTACH ADDITIONAL SHEETS IF REQUIRED)