Date of Addendum No 2: August 3, 2022

Previous Issue:
Addendum No 1 – July 29,2022
Construction Documents – July 22, 2022

Owner

Town of Pembroke, MA
128 Center Street
Pembroke, MA Boston, MA 02359

Owners Representative

Compass Project Management
One Edgewater Drive, Suite 204
Norwood, MA 02062

Architect

Bargmann Hendrie + Archetype
9 Channel Center Street, Suite 300
Boston, MA 02210

This Addendum forms part of the Contract Documents and modifies the original Bidding Documents dated July 22, 2022 and Addendum No 1 dated July 29, 2022.

Acknowledge receipt of this Addendum in the space provided in the appropriate space on the Form for General Bid and Form for Sub-Bid. Failure to do so will be subject to Bidder disqualification.

Attachments:

Specifications: 6 project manual sections revised as noted in the Addendum. Included and issued in full are 3 sections: the Table of Contents and 2 new sections.

Drawings: 32 drawings are revised as noted in this Addendum. Included and issued in full are 0 new and 23 revised sheets.

RFIs: Response to Bidder Questions are included below.

SPECIFICATIONS (PROJECT MANUAL)

1. TABLE OF CONTENTS

   A. Add line 00902 to reflect Addendum No. 2

B. Add line 035412 – Gypsum Cement Underlayment

C. Revise line 077100 – after Roof Specialties add "(part of 07002 FSB)

D. Add line 105600 – Storage Shelving and Support Brackets

2. 00100 – INSTRUCTION TO BIDDERS

A. In paragraph 6, after "…compasspminc.com" add "and bha@bhplus.com"

3. 0011100 – SUMMARY OF WORK

A. Paragraph 1.7D, delete the following sentence: "Particular care is required, due to the Owner's intent to preserve the historic fabric of the building."

4. NEW 035412 -GYPSUM CEMENT UNDERLAYMENT

A. Add this section in full – first issue.

5. 096510 – RESILIENT FLOORING AND ACCESSORIES

A. Paragraph 2.6, sub-paragraph B2 – replace "Adhesives, for Resilient Sheet Flooring" with "Not Used"

B. Delete Paragraph 2.6, sub-paragraph C – Seamless-Installation Accessories

C. Delete Paragraph 2.6, sub-paragraph D – Integral-Flash-Cove Base Accessories

D. Delete Paragraph 2.6, sub-paragraph E – Metal Edge Strip

E. Paragraph 3.6 A – Delete line 2.

6. NEW 105600 – STORAGE SHELVING AND SUPPORT BRACKETS

A. Add this section in full – first issue.

DRAWINGS

GENERAL

1. G0001 – DRAWING LIST

A. Change drawing title A506 to be "Enlarged Plans & Elevations"

B. Change drawing title A524 to be "Reception Desks and Kitchen Elevations"

ARCHITECTURAL

2. A002 – PARTITION TYPES AND EXTERIOR ASSEMBLIES – sheet reissued

A. Revise Detail 10 to clarify roof underlayment

B. Add Detail 11 – Floor Assembly Level 2 – Wood Frame

3. A101 – FIRST FLOOR PLAN

A. At notes add: "4. Refer to specifications 033000 Cast in Place Concrete and 035412 Gypsum Cement Underlayment for self-leveling underlayment as necessary to meet required finish floor tolerances."

B. At Gym Lobby 103, Change door tag from 206A to 106A.

C. At Kitchen 104, add interior elevation key with east walls as 7&8/A524; west wall indicated as 9/A524; south wall as 10/A524; and north wall indicated as 11/A524.

4. A102 – SECOND FLOOR PLAN

A. At notes (right side of sheet) add: "1. Refer to specifications 033000 Cast in Place Concrete and 035412 Gypsum Cement Underlayment for self-leveling underlayment as necessary to meet required finish floor tolerances."

B. At Men 211 add door tag 211.

C. At Gym /Walking Track 208 – at six locations noted as "backstops" add graphic representation of retractable forward folding backstops – refer to revised and reissued sheet A802 in this addendum (Addendum 2).

5. A300 – BUILDING SECTIONS

A. At all four sections through the gym – revise graphic representation of retractable backstops from side folding to forward folding backstops – total of 6 backstops, located per revised and reissued A802 in this addendum (Addendum 2).

6. A500 – GYM LAYOUT AND STRIPING PLAN

A. On 1. Enlarged Gym Plan: at note "volleyball sleeve" add detail key with reference tag 2/A500 (typical for 6).

1. At note "volleyball sleeve" add detail key with reference tag 2/A500 (typical for 6).

2. Change note "side fold retractable backstop" to "forward fold retractable backstop" – typical 6 locations.

B. On Detail 3 – replace note that starts with "seal concrete floor…" with refer to finish schedule and finish plan for track surface.

7. A501 – ENLARGED PLANS AND ELEVATIONS AT MP ROOM – sheet reissued

A. Added notes to elevations as clouded to clarify HM frames and wood trim.

B. At 1D – two double hung windows shown as per exterior elevations.

8. A502 – ENLARGED PLANS AND ELEVATIONS AT PROGRAM ROOMS – sheet reissued

A. Added notes to elevations as clouded to clarify HM frames and wood trim.

9. A503 – ENLARGED PLANS AND ELEVATIONS AT TOILET ROOMS – sheet reissued

A. Added notes to elevations as clouded to clarify HM frames and wood trim.

B. At Elevations 1E and 1F add note to clarify tile type.

C. Add Elevation 1J and 1K at Men's Shower to clarify extent of wall tile.

D. Revise elevations 1H and 1I – Custodian to clarify extent of wall tile and FRP-1 Paneling

10. A504 – GYM ELEVATIONS – sheet reissued

A. For both Elevations on this sheet the following notes have been added as clouded to clarify:

1. Change from side fold to forward fold basketball backstops (total of 6 backstops)

2. HM frames and wood trim.

3. Added note clarifying high impact GWB and detailed on 4/A002

4. Added notes for motorized window shades as issued on A802 in Addendum 1.

5. Added detail keys at railing with reference to details on sheet A520.

11. A505 – GYM ELEVATIONS – sheet reissued

A. For both Elevations on this sheet the following notes have been added as clouded to clarify:

1. Change from side fold to forward fold basketball backstops (total of 6 backstops)
2. HM frames and wood trim.
3. Added note clarifying high impact GWB and detailed on 4/A002
4. Added notes for motorized window shades as issued on A802 in Addendum 1.
5. Added detail keys at railing with reference to details on sheet A520.

12. A506 – ENLARGED PLANS & ELEVATIONS – sheet reissued

A. Change Drawing Title to be “Enlarged Plans & Elevations”

B. Added notes to elevations as clouded to clarify HM frames and wood trim.

C. At Elevation 2A – relocate note from drawing title for legibility.

13. A524 – RECEPTION DESKS, AND KITCHEN ELEVATIONS – sheet reissued

A. Change Drawing Title to be, “Reception Desks and Kitchen Elevations”

B. Elevations 2A, 2B, and 2C – relocated on sheet to make space for other details.

C. At Reception Desk Elevations 1A, 1B, 1C, 1D, 2A, 2B, and 2C – detail references are added.

D. At notes add: “2. Refer to Fs100 and FS101 for additional information on Kitchen.”

E. Add Elevations 7 and 8 - Kitchen East Elevations for clarification of wall finish and kitchen equipment Base Bid and Alternate 2.

F. Add Elevation 9 – Kitchen West Elevation for clarification of wall finish and kitchen equipment Base Bid and Alternate 2.

G. Add Elevation 10 – Kitchen South Elevation for clarification of wall finish and kitchen equipment Base Bid and Alternate 2.

H. Add Elevation 11 – Kitchen North Elevation for clarification of wall finish and kitchen equipment Base Bid and Alternate 2.

I. At details 3, 4 and 5 – change notes from “see finish spec” to “see finish schedule”.

14. A600 – DOOR SCHEDULE – sheet reissued

A. Door Schedule labeled as “A” with revisions to door information as clouded including but not limited to card readers per Technology Drawings.

B. Hollow Metal Door Frames added and referenced as “B”.

C. Door Types labeled as “C”. Door types D3 and D6 marked as “Not Used”

D. Security Grilled Types labeled as “D”.

15. A601 – ENLARGED WINDOW DETAILS – sheet reissued

A. Add Detail 9 – Exterior Mullion / Transom Detail Metal – Typical

B. Add Detail 10 – Exterior Mullion Detail Wood - Typical

16. A602 – WINDOW TYPES & FLASHING SEQUENCE – sheet reissued

    A. Window Types – Fiberglass window Units – clarification noted and detail keys added.

17. A700 – ROOM FINISH SCHEDULE AND LEGEND

    A. On the Finish Legend change the following:

        1. At FLOORS, TL-2 in notes column after unpolished add: “for TL-2 use TB-3”
        2. At FLOORS, TL3 in notes column after unpolished add: for TL-3 use TB-2”
        3. At WALLS, after tile add heading FRP and then: FRP-1 (at key/type); Custodial (at location)
        4. At COUNTERS/MILLWORK, Display Case – add WD-3 (at key/type); change “glass” to tempered glass”.
        5. At COUNTERS/MILLWORK, SC Lounge” replace “counter” with “shelf”: add WD-2 (at key/type); add 12” x 5’-4” (at size/dimension).

    B. On the Room Finish Schedule change the following primarily, but not only, related to tile:

        1. 104 kitchen base – replace with “TB-1”; walls replace with “TL-6”
        2. 108 Custodian base – replace with “TB-3”; wall – replace with “FRP-1/Painted GWB”
        3. 109 Women’s Toilet base – replace with “TB-2 and TB-3”; walls – replace with “behind sink TL4 / behind toilet TL-5 / all others painted GWB”
        4. 109A Women’s Shower base - replace with “TB-3”; walls – replace with “TL-5”
        5. 110 Men’s Toilet base – replace with “TB-2 and TB-3” ; walls – replace with “behind sink TL-4 / behind toilet TL-5 / all others painted GWB”
        6. 110A Men’s Shower base – replace with “TB-3”; walls – replace with “TL-5”
        7. 111 Storage walls - replace with “Painted GWB”
        8. 113 Companion Toilet floor – replace with “Tile-2”; and base – replace with “TB-3”; walls – replace with “south wall TL-5 / all others painted GWB”
        9. 115 Staff Toilet base – replace with “TB-2”; walls – replace with “north wall TL-4 / all others painted GWB”
        10. STR1 Stair 1 base - replace with “vinyl toeless”
        11. 204 Corridor floor - replace with “Carpet 2 / Tile-3”; base – replace with vinyl toeless/TB-2”
        12. 209 Custodian base – replace with “TB-2”; wall – replace with FRP-1/Painted GWB”
        13. 210 Women’s Toilet base – replace with “TB-2 and TB-3”; walls – replace with “behind sink TL-4 / behind toilet TL-5 / all others painted GWB”
        14. 211 Men’s Toilet base – replace with “TB-2 and TB-3”; walls – replace with “behind sink TL-4 / behind toilet TL-5 / all others painted GWB”
        15. STR1 Stair 1 base – replace with “vinyl toeless”

18. A702 – SECOND FLOOR FINISH PLAN

    A. At Gym /Walking Track 208 – at six locations noted add graphic representation of

retractable forward folding backstops – refer to revised and reissued sheet A802 in this addendum (Addendum 2).

19. A802 – SECOND FLOOR REFLECTED CEILING PLAN – sheet reissued
    - A. Retractable basketball backstops changed from side folding to forward folding (total of 6).
    - B. Gym light fixture location adjustment for coordination with divider curtains and forward fold basketball backstops. Four (4) P7 fixtures added.
20. FS100 – FIRST FLOOR KITCHEN EQUIPMENT AND UTILITY ROUGH-IN PLANS
    - A. Enlarge note above Schedule of Foodservice Equipment and Connections x2 for clarity of Base Bid work and Alternate #2 work.
21. FS101 – FIRST FLOOR KITCHEN SPECIAL CONDITIONS & DETAILS
    - A. Mirror Elevation (A) – Three Compartment Sink to reflect plan on FS100.
    - B. Mirror Elevation (C) - Prep table with Sink to reflect plan on FS100.

STRUCTURAL

22. S001 – GENERAL NOTES AND ABBREVIATIONS – sheet reissued
    - A. Clarifications to Note L5 – Seismic loads for the Gymnasium and Community Center.
23. S101 – FIRST FLOOR/FOUNDATION PLAN – sheet reissued
    - A. Revisions to columns and foundations along Line 3.6.
    - B. Clarification to column footing sizes on Line 3.2 and Line 3.3.
24. S102 – SECOND FLOOR FRAMING PLAN – sheet reissued
    - A. Revision to beam size on Line 3.6.
    - B. Add new section 18 on S502 along Line 3.6.
25. S502 – FRAMING SECTION II – sheet reissued
    - A. Revisions Section 7 and Section 10.
    - B. Add new Section 18.
26. S504 – FRAMING SECTIONS IV – sheet reissued
    - A. Clarifications to Section 2 and Section 3.

ELECTRICAL

27. E100 – ELECTRICAL FIRST FLOOR PLAN POWER AND FIRE ALARM – sheet reissued
    - A. Revise access control and low voltage to match respective plans.
28. E101 – ELECTRICAL SECOND FLOOR PLAN POWER AND FIRE ALARM – sheet reissued
    - A. Revise access control and low voltage to match respective plans.
29. E201 – SECOND FLOOR PLAN LIGHTING – sheet reissued
    - A. Gym light fixture location adjustment for coordination with divider curtains and forward fold basketball backstops. Four (4) P7 fixtures added.

TECHNOLOGY SYSTEMS

30. T101 – TECHNOLOGY FIRST FLOOR PLAN – sheet reissued
    - A. Change door to the gym from corridor to an access control door.
    - B. Add a wall phone outlet in the gym.
31. T102 – TECHNOLOGY SECOND FLOOR PLAN – sheet reissued
    - A. Change door to the Track from corridor to an access control door.
    - B. Add a wall phone outlet at the track.
    - C. Change door to Program Room 4 to an access control door.
32. T301 – TECHNOLOGY RISERS – sheet reissued
    - A. Add first floor Gym door to the corridor to the access control riser.
    - B. Add second floor Track door to the corridor to the access control riser.
    - C. Add Program room 4 to the access control riser.

REQUESTS FOR INFORMATION

The following is a summary of requests for information, questions and inquiries by Plan Holders. A clarification with no change to the Documents are answered below. Responses that require a change to the Contract documents have been included in the Addendum Changes.

1. Question Regarding Masonry Flashing
    - A. Please confirm who owns furnishing and installing the metal flashing cap at the top of the ground face CMU?

      Response: Metal flashing cap at top of ground face CMU to be owned by the sheet metal installer, spec. section 076200, included within FSB 070002. Revised details (if necessary) to be issued in a forthcoming addendum.
2. Questions Regarding – Electrical and FSB work
    - A. Please confirm all work and material described Please confirm all work described in non-electrical specs or shown on non-electrical drawings, without being described in the electrical specs is for coordination purposes only and shall not be part of the electrical contractor's bid for this project.

      Response: Refer to Addendum 1 for clarifications to Electrical 260000 and FSB for Div 27 and Div 28 FSB.
    - B. Is Builders Risk Insurance by Owner?

      Response: Builders Risk is defined in Article 11 of supplemental General Conditions. Contractors/ all subs are covered. Deductible amount will be determined at the time the policy is created
    - C. Section 271000 requires the electrical sub-bidder to provide certain information in the proposal. Does the electrical sub bidder have to provide this information?

Response: Yes, the File Sub Bid is required to provide the information with their bid. Refer also to Addendum 1.

D. Section 280000 requires the electrical sub-bidder to provide certain information in the proposal. Does the electrical sub bidder have to provide this information?

Response: Yes, the File Sub Bid is required to provide the information with their bid. Refer also to Addendum 1.

3. Questions Regarding Schedule

A. Could you tell me the completion date for the project? It is not in the sample agreement

Response: Construction duration is note in 00100 - Instruction to Bidders - Section 2.

4. Question Regarding HVAC and Alternate 2

A. Section 012300-2, 3.2 B, please indicate on contract drawings, H100, HP100, H101, and H102 all work associated with alternate (2) if applicable.

Response: The kitchen hood, exhaust fan, make-up air, ductwork and associated controls all being installed as part of the base bid and other kitchen equipment are installed later through Alternate 2. There are no HVAC connections for the Alternate 2 equipment.

5. Questions Regarding Tile

A. Clarify tile scope in Kitchen 104.

Response: Per Finish Schedule, tile on floor, tile base, and tile on all walls (full height). Refer also to Kitchen elevations issued in this addendum (Addendum 2) on sheet A524.

B. Clarify wall tile scope in Custodian Closets 108 and 209.

Response: Custodial closets shall have tile floors and tile base with FRP panels to 48" AFF. Refer also to clarification provided in this addendum (Addendum 2) on sheet A700 and A503.

C. Clarify wall tile scope in Women's Shower 109A and Men's Shower 110A.

Response: Wall tile on all walls (full height). Refer also to added elevations in this addendum (Addendum 2) on A503 for clarification to tile type.

D. Clarify wall finish in Storage Room 111.

Response: Tile on floor and tile base on all walls. Above will be GWB (painted). Refer also to revision in this addendum (Addendum 2) on sheet A700 – Finish Schedule

E. Room Finish Schedule lists TILE 3 as the Floor Finish in Companion Toilet 113. A701 is showing TL-2. Please advise on which floor tile should be carried here.

Response: Floor tile should be TL-2 and base should be TB-3. Refer also to clarification provided in this addendum (Addendum 2) on sheet A700.

F. Clarify tile type in Companion Room 113 and Staff 115

Response: Tile base TB-2 goes with tile TL-3 AND tile base TB-3 goes with TL-2.

G. What tile base is to be used in Corridor 204 outside of Custodian 209?

Response: All areas with TL-3 should have TB-2

6. Questions Regarding Resilient Flooring

A. Paragraph 1.2 A. 5. states "High-performance adhesive suitable for RH & pH measured in

substrate." Please identify the RH & pH limit requirements.

Response: As recommended by final selection of finish flooring material/manufacture.

B. Detail drawings T1 & T8/A521 indicate Gypcrete underlayment at the second floor. Please provide a specification for the Gypcrete underlayment or clarify which section owns the Gypcrete underlayment work on the 2nd floor.

Response: Specification section 035412 - Gypsum Cement Underlayment is added in the addendum (Addendum 2).

C. Paragraph 2.6 B. 2. lists adhesives for Resilient Sheet Flooring. Please confirm that no resilient sheet flooring is required for this section.

Response: Correct, no resilient sheet flooring. Specification section 09650 is revised in the addendum (Addendum 2).

D. Paragraph 2.6 C. D. & E. indicates seamless heat welding installation with integral flash cove base & metal flash cove cap strips. Please confirm that seamless heat welding and integral flash cove base is not required for the work of this section.

Response: Correct, no seamless heat welding, no integral flash cove base, and no metal edge strips. Specification section 09650 is revised in the addendum (Addendum 2).

E. Paragraph 3.6 A. 2. indicates the installation of Resilient Stair Treads. Please confirm that no Resilient Stair Treads are required on this project.

Response: Correct no resilient stair treads. Specification section 09650 is revised in the addendum (Addendum 2).

7. <u>Question Regarding Resilient Athletic Flooring</u>

A. Section #096560 Resilient Athletic Flooring 2.2 C. indicates Game-Line & Marker Paint to be used with SPTS-RES-1 & 2 at Walking Track 208 on A702. Please confirm if this will be required as painted track lines are only called out with the Sealed Concrete Alternate as shown 3/A500.

B. Response: 2” lines are intended between the track colors indicated on the finish plans. Detail 3/A500 is revised in this addendum (Addendum 2).

8. <u>Questions Related to Fire Protection</u>

A. The drawings show no attic protection on the roof plan but do include a note saying to provide sprinklers within the attic space. Could a drawing be provided showing this protection?

Response: Attic space is limited to space above 2nd floor ceiling. This area is a concealed combustible space. As such, only concealed combustible sprinklers are required. Note that the insulation for this space is at the roof line.

B. Per Structural Drawing S001, this building is designated as a Seismic Design Category “B”, will seismic bracing and related scope be required for the fire protection scope 210000? Per the Mass State Building Code 780CMR 9th Edition, and ASCE 7 (2010) (paragraph 13.1.4.4), seismic bracing may be eliminated in buildings that fall under Seismic Design Category "A" or “B”. Except in specific cases like Emergency shelters, or the like.

Response: Seismic bracing shall not be required for fire protection system.

END OF ADDENDUM NO. 2

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PROJECT MANUAL

TABLE OF CONTENTS

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

PROCUREMENT REQUIREMENTS

		Author	First Issue	Revised Date
00110	Table of Contents	BH+A	7/22/22	7/29/22, 8/3/22
00020	Invitation to Bid	ToP	7/22/22	
00100	Instructions to Bidders	ToP	7/22/22	
00101	Supplemental instructions to Bidders for Submitting an Electronic Bid (E-Bid)`	ToP	7/22/22	
	Additional Instructions for Electronic Bid	ToP	7/22/22	
00125	List of Prequalified Bidders	ToP	7/22/22	
00400	DCAMM Prime/General Update Statement	ToP	7/22/22	
	Cover page and DCAMM Form	ToP	7/22/22	
00401	DCAMM Sub-Bidder Update Statement	ToP	7/22/22	
	Cover page and DCAMM Form	ToP	7/22/22	
00402	Certifications Required by Law for Public Construction Contracts	ToP	7/22/22	
00415	Form of General Bid	ToP	7/22/22	
00416	Form of Sub Bid	ToP	7/22/22	
00417	Unit Price Proposal Sheet	ToP	7/22/22	7/29/22

CONTRACTING REQUIREMENTS

		Author	First Issue	Revised Date
00500	Form of Agreement Between Owner and Contractor	ToP	7/22/22	
	AIA A101 - 2017	ToP	7/22/22	
00501	Certificate of Vote	ToP	7/22/22	
00610	Construction Performance Bond	ToP	7/22/22	
00620	Construction Payment Bond	ToP	7/22/22	
00700	General Conditions	ToP	7/22/22	
	AIA 201-2017		7/22/22	
00750	Supplemental General Conditions for Construction AIA201-2017	ToP	7/22/22	
00800	Insurance	ToP	7/22/22	
00825	Prevailing Wage	ToP	7/22/22	
	Attachment A – Wage Rate Request	ToP	7/22/22	
	Attachment B – Commonwealth of Massachusetts Prevailing Wage Notices	ToP	7/22/22	
	Attachment C – Payroll Compliance	ToP	7/22/22	

* Filed Sub-Bid Required

	Attachment D – Payroll Reporting Form	ToP	7/22/22	
00850	Incorporation of Applicable Provisions of MA General Laws	ToP	7/22/22	
00901	Addendum No. 1	BH+A/KA	729/22	
00902	Addendum No. 2	BH+A/KA	8/3/22	

SPECIFICATIONS

DIVISION 01 - GENERAL REQUIREMENTS

		Author	First Issue	Revised Date
011100	Summary of Work	BH+A/KA	7/22/22	
011400	Work Restrictions	BH+A/KA	7/22/22	
011400.1	Decision of the Planning Board	ToP	7/29/22	
011401	Electronic Release Form	BH+A/KA	7/22/22	
012200	Unit Prices	BH+A/KA	7/22/22	
012300	Alternates	BH+A/KA	7/22/22	
012400	Schedule of Values	BH+A/KA	7/22/22	
013100	Project Management and Coordination	BH+A/KA	7/22/22	
013119	Project Meetings	BH+A/KA	7/22/22	
013200	Construction Progress Documentation	BH+A/KA	7/22/22	
013300	Submittal Procedures	BH+A/KA	7/22/22	
013301	Substitution Request Form	BH+A/KA	7/22/22	
013543	Environmental Procedures	UEC	7/22/22	
014000	Quality Requirements	BH+A/KA	7/22/22	
014330	Mock-Ups	BH+A/KA	7/22/22	
015000	Temporary Facilities and Controls	BH+A/KA	7/22/22	
017329	Cutting and Patching	BH+A/KA	7/22/22	
017400	Construction Waste Management	BH+A/KA	7/22/22	
017700	Closeout Procedures	BH+A/KA	7/22/22	
017839	Project Record Documents	BH+A/KA	7/22/22	
018100	General Commissioning Requirements	ToP	7/22/22	
0181119	Indoor Air Quality Requirements	BH+A/KA	7/22/22	

DIVISION 02 - EXISTING CONDITIONS

		Author	First Issue	Revised Date
022820	Asbestos Remediation	UEC	7/22/22	
023000	Subsurface Investigation	BH+A/KA	7/22/22	
024100	Demolition	BH+A/KA	7/22/22	
029000	Div 02 – Available Project Information	BH+A/KA	7/22/22	
029001	Existing Building Plans	ToP	7/22/22	
029002	Existing Building Photographs	BH+A/KA	7/22/22	
029003	Geotechnical Engineering Report	MGA	7/22/22	
029004	Flow Test	MELS	7/22/22	

* Filed Sub-Bid Required

DIVISION 03 – CONCRETE

		Author	First Issue	Revised Date
033000	Cast-In-Place Concrete	FBRA	7/22/22	
035412	Gypsum Cement Underlayment	BH+A/KA	8/3/22	

DIVISION 04 - MASONRY

		Author	First Issue	Revised Date
040001 *	Masonry Work	BH+A/KA	7/22/22	
042000	Unit Masonry (part of 040001 FSB)	BH+A/KA	7/22/22	

DIVISION 05 - METALS

		Author	First Issue	Revised Date
050001 *	Miscellaneous and Ornamental Iron	BH+A/KA	7/22/22	
051200	Structural Steel Framing	FBRA	7/22/22	
051226	Shear Connections	FBRA	7/22/22	
053100	Steel Decking	FBRA	7/22/22	
054000	Cold-Formed Metal Framing	BH+A/KA	7/22/22	
055000	Metal Fabrications (part of 050001 FSB)	BH+A/KA	7/22/22	
055100	Metal Stairs and Railings (part of 050001 FSB)	BH+A/KA	7/22/22	

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

		Author	First Issue	Revised Date
061000	Rough Carpentry	FBRA/BH+A	7/22/22	
061600	Sheathing	BH+A/KA	7/22/22	
061753	Shop Fabricated Wood Trusses	FBRA	7/22/22	
062010	Exterior Finish Carpentry	BH+A/KA	7/22/22	
064020	Interior Architectural Woodwork	BH+A/KA	7/22/22	
066400	FRP Paneling	BH+A/KA	7/22/22	

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

		Author	First Issue	Revised Date
070001 *	Waterproofing, Dampproofing and Caulking	BH+A/KA	7/22/22	
070002 *	Roofing and Flashing	BH+A/KA	7/22/22	
071100	Bituminous Dampproofing (part of 070001 FSB)	BH+A/KA	7/22/22	
071300	Sheet Waterproofing (part of 070001 FSB)	BH+A/KA	7/22/22	
071400	Fluid-Applied Waterproofing (part of 070001 FSB)	BH+A/KA	7/22/22	
071610	Crystalline Waterproofing (part of 070001 FSB)	BH+A/KA	7/22/22	

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072100	Thermal Insulation	BH+A/KA	7/22/22	
072600	Vapor Retarder	BH+A/KA	7/22/22	
072700	Air Barriers (part of 070001 FSB)	BH+A/KA	7/22/22	
073113	Asphalt Shingles (part of 070002 FSB)	BH+A/KA	7/22/22	
074610	Fiber-Cement Siding	BH+A/KA	7/22/22	
075400	Thermoplastic Membrane Roofing (part of 070002 FSB)	BH+A/KA	7/22/22	
076200	Sheet Metal Flashing and Trim (part of 070002 FSB)	BH+A/KA	7/22/22	
077100	Roof Specialties (part of 07002 FSB)	BH+A/KA	7/22/22	
077200	Roof Accessories	BH+A/KA	7/22/22	
078410	Penetration Firestopping	BH+A/KA	7/22/22	
078440	Fire-Resistive Joint Systems	BH+A/KA	7/22/22	
079200	Joint Sealants (part of 070001 FSB)	BH+A/KA	7/22/22	
079500	Expansion Control	BH+A/KA	7/22/22	

DIVISION 08 - OPENINGS

		Author	First Issue	Revised Date
080002 *	Glass and Glazing	BH+A/KA	7/22/22	
081110	Hollow Metal Doors and Frames	BH+A/KA	7/22/22	
081400	Flush Wood Doors	BH+A/KA	7/22/22	
083110	Access Doors and Frames	BH+A/KA	7/22/22	
083310	Overhead Coiling Doors	BH+A/KA	7/22/22	
083320	Overhead Coiling Grilles	BH+A/KA	7/22/22	
083419	Fiberglass Doors and Frames	BH+A/KA	7/22/22	
085413	Fiberglass Windows	BH+A/KA	7/22/22	
087100	Door Hardware	ASC	7/22/22	
088000	Glazing (part of 080002 FSB)	BH+A/KA	7/22/22	
089000	Louvers and Vents	BH+A/KA	7/22/22	

DIVISION 09 - FINISHES

		Author	First Issue	Revised Date
090002 *	Tile	BH+A/KA	7/22/22	
090003 *	Acoustical Tile	BH+A/KA	7/22/22	
090005 *	Resilient Floors	BH+A/KA	7/22/22	
090007 *	Painting	BH+A/KA	7/22/22	
092110	Gypsum Board Assemblies	BH+A/KA	7/22/22	
092120	Gypsum Board Shaft-Wall Assemblies	BH+A/KA	7/22/22	
093000	Tiling (part of 090002 FSB)	BH+A/KA	7/22/22	
095100	Acoustical Ceilings (part of 090003 FSB)	BH+A/KA	7/22/22	
096460	Wood Athletic Flooring	BH+A/KA	7/22/22	
096510	Resilient Flooring and Accessories (part of 090005 FSB)	BH+A/KA	7/22/22	
096560	Resilient Athletic Flooring (part of 090005 FSB)	BH+A/KA	7/22/22	

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~~096710~~	~~Resinous Flooring~~	~~BH+A/KA~~	~~7/22/22~~	
096800	Carpeting	BH+A/KA	7/22/22	
099000	Painting and Coating (part of 090007 FSB)	BH+A/KA	7/22/22	

DIVISION 10 - SPECIALTIES

		Author	First Issue	Revised Date
101400	Signage	BH+A/KA	7/22/22	
102110	Toilet Compartments	BH+A/KA	7/22/22	
102220	Folding Panel Partitions	BH+A/KA	7/22/22	
102800	Toilet Accessories	BH+A/KA	7/22/22	
104100	Emergency Access and Information Cabinets	BH+A/KA	7/22/22	
104400	Fire Protection Specialties	BH+A/KA	7/22/22	
105600	Storage Shelving and Support Brackets	BH+A/KA	8/3/22	

DIVISION 11 - EQUIPMENT

		Author	First Issue	Revised Date
114000	Foodservice Equipment	CMI	7/22/22	
116620	Athletic Equipment	BH+A/KA	7/22/22	

DIVISION 12 - FURNISHINGS

		Author	First Issue	Revised Date
122400	Shades	BH+A/KA	7/22/22	
124815	Entrance Floor Mats	BH+A/KA	7/22/22	

DIVISION 14 - CONVEYING EQUIPMENT

		Author	First Issue	Revised Date
140001 *	Elevators	BH+A/KA	7/22/22	
142100	Machine Roomless Passenger Traction Elevator (part of 140001 FSB)	BSq	7/22/22	
144000	Elevator Maintenance and Repair	BSq	7/22/22	

DIVISION 21 - FIRE SUPPRESSION

		Author	First Issue	Revised Date
210000 *	Fire Protection	ACE	7/22/22	

DIVISION 22 - PLUMBING

		Author	First Issue	Revised Date
220000 *	Plumbing	ACE	7/22/22	

* Filed Sub-Bid Required

DIVISION 23 - HEATING VENTILATING AND AIR CONDITIONING

		Author	First Issue	Revised Date
230000 *	Heating, Ventilating and Air-Conditioning	ACE	7/22/22	

DIVISION 26 - ELECTRICAL

		Author	First Issue	Revised Date
260000 *	Electrical	ACE	7/22/22	7/29/22
260100 *	Generator (part of 26000 FSB)	ACE	7/22/22	7/29/22

DIVISION 27 – COMMUNICATIONS

		Author	First Issue	Revised Date
270000 *	Communications General (part of 26000 FSB)	BTC	7/22/22	7/29/22
270526 *	Grounding and Bonding (part of 26000 FSB)	BTC	7/22/22	7/29/22
270528 *	Pathways for Communications Systems (part of 26000 FSB)	BTC	7/22/22	7/29/22
270553 *	Identification for Telecommunications Systems (part of 26000 FSB)	BTC	7/22/22	7/29/22
270813 *	Testing Copper Cables (part of 26000 FSB)	BTC	7/22/22	7/29/22
271000 *	Structured Cabling (part of 26000 FSB)	BTC	7/22/22	7/29/22
271100 *	Communications Equipment Room and Fittings (part of 26000 FSB)	BTC	7/22/22	7/29/22
271500 *	Communications Horizontal Cabling (part of 26000 FSB)	BTC	7/22/22	7/29/22
271600 *	Communications Connecting Cords Devices and Adapters (part of 26000 FSB)	BTC	7/22/22	7/29/22

DIVISION 28 – FIRE ALARM

		Author	First Issue	Revised Date
280000 *	Security (part of 26000 FSB)	BTC	7/22/22	7/29/22
	Schedule A, Camera Schedule	BTC	7/22/22	
283100 *	Fire Detection and Alarm System (part of 26000 FSB)	ACE	7/22/22	7/29/22

DIVISION 31 - EARTHWORK

		Author	First Issue	Revised Date
311000	Site Clearing	MELS	7/22/22	
312300	Earthwork	MELS	7/22/22	
312319	Dewatering	MELS	7/22/22	
312500	Erosion and Sedimentation Controls	MELS	7/22/22	
315000	Excavation Support and Protection	MELS	7/22/22	

* Filed Sub-Bid Required

DIVISION 32 - EXTERIOR IMPROVEMENTS

		Author	First Issue	Revised Date
321216	Asphalt Paving	MELS	7/22/22	
321313	Cement Concrete Handicap Ramps	MELS	7/22/22	
323000	Site Improvements	KZLA	7/22/22	
323129	Wood Fences	KZLA	7/22/22	
328413	Irrigation (Alternate #1)	KZLA	7/22/22	
329000	Planting	KZLA	7/22/22	
329113	Planting Soil	KZLA	7/22/22	
329219	Turf and Grasses	KZLA	7/22/22	

DIVISION 33 - UTILITIES

		Author	First Issue	Revised Date
331000	Water Systems	MELS	7/22/22	
333000	Sanitary Sewerage Utilities	MELS	7/22/22	
333600	Septic Tank Systems	MELS	7/22/22	
334000	Storm Drainage Utilities	MELS	7/22/22	

AUTHOR REFERENCE:

ToP	Town of Pembroke, MA
bh+a	Bargmann Hendrie + Architype
KA	Kalin Associates
BSq	B Squared Engineering
MELS	Merrill Engineers and Land Surveyors
KZLA	Kyle Zick Landscape Architecture
ACE	Allied Consulting Engineering
FBRA	Foley Buhl Roberts & Associates
MGA	McArdle Gannon Associates
C3	Commercial Construction Consulting
UEC	Universal Environmental Consultants
CMA	Crabtree McGrath Associates
PAV	Pro AV Systems
ASC	ASC – Hardware
BTC	Building Technology Consulting

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SECTION 035412

GYPSUM CEMENT UNDERLAYMENT

PART 1 - GENERAL

1.1 GENERAL PROVISIONS

A. Attention is directed to the CONTRACT AND GENERAL CONDITIONS and all Sections within DIVISION 01 - GENERAL REQUIREMENTS which are hereby made a part of this Section of the Specifications.

1.2 DESCRIPTION OF WORK

A. Work Included: Provide labor, materials and equipment necessary to complete the work of this Section, including but not limited to the following:

1. Gypsum cement floor topping used as finish floor underlayment, typically 1-1/4-inch-thick topping over 1/4-inch acoustic mat at units, and 1-1/2 inches thick at corridors without acoustic mat.
2. Sub-floor joint and crack preparation.
3. Primers.
4. Sealer/overspray protection. Work of this Section includes sealing bottom of wallboard with asphaltic paper or tape to prevent moisture damage, and pour stops and sealing to prevent leakage to other areas.

B. Related Work: The following items are not included in this Section and will be performed under the designated Sections:

1. Section 033000 - CAST-IN-PLACE CONCRETE for concrete slab construction.
2. Section 061000 - ROUGH CARPENTRY for construction panel subflooring.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated. Include design mixes with proposed strengths. Include information necessary to establish conformance with specified performance criteria; instructions for installing, curing and repairing of underlayment and for installation of floor finishes.

B. Field quality-control test reports.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for floor toppings.

1. Include UL Assembly test reports indicating compliance with indications on drawings and UL #L546.

D. Minutes of preinstallation conference.

E. Certificates: Provide or certify compliance with the following:

1. Specifications.

2. UL No. L546.
3. From authorities having jurisdiction indicating approval of underlayment materials in the required fire rated assemblies.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency qualified according to ASTM C 1077 and ASTM E 329 for testing indicated, as documented according to ASTM E 548.

B. Mockups: Place underlayment mockups to demonstrate typical joints, surface finish, bonding, texture, tolerances, and standard of workmanship.

1. Build mockups approximately 100 sq. ft. in the location indicated or, if not indicated, as directed by Architect.
2. If Architect determines that mockups do not meet requirements, demolish and remove them from the site and cast others until mockups are approved.
3. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01.

D. The underlayment installer shall be an authorized applicator approved by the product manufacturer with not less than 5 years experience on comparable projects.

E. Use only mixing and pumping equipment approved by the manufacturer.

F. Compatibility: Coordinate with flooring manufacturers to verify compatibility between underlayment and flooring.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storage, mixing with other components, and application.

B. Store materials to comply with manufacturer's written instructions to prevent deterioration from moisture or other detrimental effects.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Comply with manufacturer's written instructions for substrate temperature and moisture content, ambient temperature and humidity, ventilation, and other conditions affecting underlayment performance.

1. Place underlayment only when ambient temperature and temperature of base substrates are between 50 and 86 deg F, at least 24 hours before and 72 hours after installation.

B. Close areas to traffic during topping application and, after application, for time period recommended in writing by manufacturer.

1.7 WARRANTY

A. Special Manufacturer's Warranty: Provide manufacturer's standard form in which manufacturer agrees to repair, restore, or replace defective work within specified warranty period.

1. Warranty Period: As standard with manufacturer unless indicated otherwise.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Underlayment: “Gyp-Crete 2000 / 3.2K” gypsum concrete equal to Maxxon Commercial Mix: or equal a mill mixture of calcined gypsum and aggregate; shall comply with ASTM C317 (latest edition), Class B, Standard Specification for Gypsum Concrete, except compressive strengths shall be as specified and no wood products, chips or the like may be incorporated into the mix.

1. Compressive Strength: Provide the following minimum strength range per ASTM F2419 when tested in accordance with ASTM C472: Minimum 3000 psi.
2. Density: Minimum dry density in pounds per cubic foot - 100 for regular strength and 115 for high strength.
3. Fire Hazard Classification: Flame Spread - 0, Fuel Contributed - 0, Smoke Density - 0, when tested in accordance with ASTM D:E286.
4. VOC: Greenguard Children and Schools Certified
5. Minimum STC - Sound Transmission Class: 50 STC.
6. Minimum IIC - Impact Insulation Class: 50 IIC.

B. Sound Isolation Mat: Acousti-Mat 1/8 by Maxxon Corporation or equal.

C. Aggregate: 1/8 inch to 1/16 inch or less washed mason, mortar, or plaster sand complying with ASTM:C 144 and with Maxxon sand specification no. 101. Vary aggregate size depending upon applications. For feather edge applications, use smaller aggregate meeting specified requirements.

D. Water: potable, free from impurities.

E. Subfloor Primer: Bonding agent of type recommended by the manufacturer to provide the required adhesion between underlayment and substrate.

F. Crack and Joint Fillers: Materials recommended and approved of by underlayment manufacturer.

G. Feather to Zero Products: Installed products shall match level and flatness required for finish floor installations. Refer to applicable sections, schedules and legends. Where typical cementitious application do not produce required flatness and level, provide appropriate “feather-to-zero” products of type recommended by manufacturer for application. In general use products manufactured by Silrpo or Ardex for these applications.

2.2 MIXING PROPORTIONS

A. Mix gypsum concrete in accordance with manufacturer's recommendations for the type of placement employed and for the finish materials to be installed over the underlayment. Do not exceed amounts of water as determined by manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, with Installer present, for conditions affecting performance of underlayment.

B. Ensure building is enclosed with permanent roofs, doors, and fenestration. Do not begin installation of regular strength underlayment until gypsum wallboard has been installed.

C. Examine all surfaces to receive underlayment prior to installation. Do not commence work in any area where conditions exist which would adversely affect the adhesion and strength of the underlyament until corrective work has been completed.

1. Surfaces to receive underlayment shall be thoroughly clean, free of mud, oil, grease or other contaminants which may degrade final product.
2. Surfaces to receive underlayment shall be dry and free of moisture.
3. Test substrates with moisture meters or by other methods and report findings in writing.
4. Verify that base concrete slabs comply with scratch finish requirements specified in Section 033000 - CAST-IN-PLACE CONCRETE. Test slabs for capillary moisture by the plastic sheet method according to ASTM D 4263.

D. Proceed with application only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION - GENERAL

A. At the start of the installation and periodically as work progresses, provide the services of the manufacturer's technical representative at the job site as often as deemed necessary by the manufacturer to advise on all phases of this Work.

B. Install the system in accordance with manufacturer's published instructions, except where more stringent requirements are specified.

3.3 PREPARATION

A. Fill non-moving cracks, voids and joints as recommended by the underlayment materials manufacturer and to prevent leakage.

B. Control joints: Provide pour stops to prevent underlayment from being installed across through joints.

C. Priming - General: Prime substrate according to manufacturer’s instructions using approved product. Apply primer at rate and in number of coats recommended by manufacturer.

D. Underlayment Over Concrete Slab: Prime porous surfaces of 11% (minimum) absorption with primer. Comply with underlayment concrete manufacturer's recommendations.

3.4 INSTALLATION

A. Mix materials by methods and in proportions recommended by manufacturer.

B. Insure uniform, continuous flow of gypsum concrete at point of delivery, without segregation and loss of material. Immediately spread and screed product to a smooth surface.

C. Take necessary precautions to prevent splashing or spillage of materials onto adjoining surfaces.

D. Except at authorized joints, place underlayment as continuously as possible until entire section is complete so that no slurry is placed against gypsum concrete that has obtained its initial set, except at authorized joints.

E. Install control joints following manufacturer's recommendations in locations indicated on the Drawings.

F. Place material in one layer 3/4 inch thick. Spread and screed to a smooth surface in one continuous operation to required tolerances of level and flatness.

1. Coordinate installations at toilets.

G. Allowable Tolerances:

1. At unfinished floors and floors receiving carpet: finish surface shall be level to within L/360.
2. At floors receiving hard floor finish such as thin set stone, wood flooring or ceramic tile and VCT or the like, underlayment shall be leveled to within a tolerance of 1/8" in any 10'-0", unless otherwise shown.
3. Tolerances shall not be cumulative over runs longer than 20 feet, and in no case be sufficiently great to adversely affect proper installation of work.
4. Comply with floor flatness indicated in documents or directed by Architect.
5. Employ “feather-to-zero” products as required to meet required tolerances.
6. Do not reduce floor thickness below that required for indicated fire ratings.

H. Allow underlayment to cure properly. Block off traffic and protect floor underlayment from physical damage during curing.

I. Test for dryness by taping 24 x 24 inch sections of plastic to concrete underlayment surface. After approximately 16 hours of curing, if no condensation occurs, test the floor with moisture meters and verify that the installation meets the requirements for dryness of the specified finish.

3.5 PROTECTING AND CURING

A. General: Protect freshly placed underlayment from premature drying and excessive cold or hot temperatures.

B. Evaporation Retarder: Apply evaporation retarder to floor topping surfaces in hot, dry, or windy conditions before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying floor topping, but before float finishing.

C. Begin curing immediately after finishing floor topping. Cure by according to manufacturer's written instructions:

3.6 JOINT FILLING

A. Prepare and clean contraction joints and install semirigid joint filler, according to manufacturer's written instructions, once topping has fully cured.

B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.

C. Install semirigid joint filler full depth of contraction joints. Overfill joint and trim semirigid joint filler flush with top of joint after hardening.

3.7 REPAIRS

A. Defective Topping: Repair and patch defective underlayment areas, including areas that have not bonded to concrete substrate.

3.8 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports. Include a written report of the moisture readings and condensation tests given dates, results, attendance at test and devices used

1. Perform tests only when ambient air and underlayment surfaces are between 50 and 86 degrees.

B. Testing Services: Testing and inspecting of completed applications of floor toppings shall take place in successive stages, in areas of extent and using methods as follows:

1. Sample Sets: At point of placement, a set of 3 molded-cube samples shall be taken from the topping mix for each mobilization. Samples shall be tested according to ASTM C 109 for compliance with compressive-strength requirements.
2. Underlyament shall be tested for delamination by dragging a steel chain over the surface.
3. Underlayment shall be tested for compliance with surface flatness and levelness tolerances.

C. Remove and replace applications of floor topping where test results indicate that it does not comply with specified requirements.

D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.9 PROTECTION

A. Protection From Heavy Loads: During construction, place temporary wood planking over underlayment wherever it will be subject to heavy wheeled or concentrated loads.

END OF SECTION

SECTION 105600
STORAGE SHELVING AND SUPPORT BRACKETS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Countertop support brackets.

B. Wall Mounted standards and adjustable brackets.

1.2 RELATED SECTIONS

A. Section 055000 - Metal Fabrications.

B. Section 061000 - Rough Carpentry.

C. Section 064020 – Interior Architectural Woodwork.

D. Section 092110 - Gypsum Board Assemblies

1.3 REFERENCES

A. AAMA 605.2 - Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.

1.4 SUBMITTALS

A. Product Data: Manufacturer's data sheets on each product to be used, including installation instructions.

B. Shop Drawings: Submit plan, section, elevation and perspective drawings as necessary to properly depict the design, fabrication and installation of each product specified.

C. Verification Samples: For each finish product specified, two samples representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: All primary products specified in this section will be supplied by a single manufacturer with a minimum of ten years experience in designing and fabricating unique aluminum storage systems, support brackets and other architectural specialties.

B. Installer Qualifications: All products listed in this section are to be installed by a single installer with a minimum of five years demonstrated experience in installing products of the same type and scope as specified.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.

B. Store and dispose of hazardous materials, and materials contaminated by hazardous materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. At project closeout, provide to Owner or Owners Representative an executed copy of the manufacturer's standard limited warranty against manufacturing defect, outlining its terms, conditions, and exclusions from coverage.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Countertop Brackets Basis of Design: Rakks Architectural Shelving and Hardware, which is located at: 330 Reservoir St.; Needham, MA 02494; Toll Free Tel: 800-826-6006; Tel: 781-455-8700; Fax: 781-455-8702; Email:request info (sales@rakks.com); Web:https://rakks.com

B. Wall Standards and brackets basis of design: Knape & Vogt Mfg. Co., which is located at: 2700 Oak Industrial Dr. N.E. ; Grand Rapids, MI 49505-6083; Toll Free Tel: 800-253-1561; Tel: 616-459-3311; Fax: 616-459-0249; Email: request info (susan.hughes@kv.com); Web: www.kv.com

C. Requests for substitutions will be considered in accordance with provisions of Section 013300.

2.2 COUNTERTOP SUPPORT BRACKETS

A. "T" Style Surface Mounted Brackets: Model EH-1818, aluminum brackets for supporting countertops up to 24 inches (305mm) deep with rounded edges.

B. Finish: Off White Powder-coat.

2.3 WALL MOUNTED ADJUSTABLE SHELVING

A. Heavy Duty Shelf Standards and Brackets:
   1. Shelf Standard Components: Heavy-Duty 85 Standard double-slotted channel wall standards. Standards mounted to a suitable wall surface with mounting hardware 16 inches (406 mm) o.c. is capable of supporting 300 to 450 pounds per pair of standards when properly installed.
      a. Face: 1-31/64 inch (37.7 mm) wide by 11/16 inch (17.5 mm) deep, double slotted.
      b. Material and Finish: Steel, White, powder-coat, ROHS Compliant; provide screws with matching heads.
      c. Length of standards and depth of shelf brackets as indicated on the drawings.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.

B. If substrate preparation is the responsibility of another installer, notify Architect of

unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 COORDINATION - STORAGE SHELVING

A. Coordinate provision of shelving system with locations of other wall and ceiling mounted components such as visual display boards, casework, structural framing, light fixtures, and air diffusers to eliminate potential conflicts.

B. Coordinate requirements for stud spacing, blocking, and auxiliary structural supports to ensure adequate means for installation of shelving system.

C. Coordinate installation of shelving system with application of wall and ceiling finishes. To the extent possible install shelving components after finishes have been applied.

3.4 COORDINATION - ALUMINUM SUPPORT BRACKETS

A. Coordinate provision of support brackets with design and fabrication of components to be supported to ensure compatibility of dimensions and load capacity.

B. Coordinate requirements for stud spacing, blocking, and auxiliary structural supports to ensure adequate means for installation and anchorage of support brackets.

C. Coordinate installation of flush mounted support brackets with application of gypsum board finish specified in Section 09 29 00 - Gypsum Board. Ensure that brackets are delivered to site and installed in a timely manner to allow for vertical bracket leg to be concealed by gypsum board.

D. After gypsum board has been applied to stud framing, install adhesive backed aluminum face plates around flush mounted brackets penetrating gypsum board.

E. Coordinate installation of surface mounted support brackets with application of wall finishes. To the extent possible install brackets after finishes have been applied.

3.5 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

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