

4400 University Drive, MS 1E4, Fairfax, Virginia 22030 Phone: 703-993-6070; Email: oubo@gmu.edu; Web: oubo.gmu.edu

INSTRUCTIONS

- 1) Complete Form HECO-6a, the "Statement of VUSBC Special Inspections" cover page. (Click on the "HECO-6a" tab below to access it.)
- Form HECO-6b to be filled out by the projects registered design professional(s), "2021 USBC Special Inspections" list. (Click on the "HECO-6b" tab below to access it.)
- 3) Obtain the Structural Engineer of Record, A/E of Record, and Smoke Control RDP signatures for the HECO-6a form.
- 4) Submit both forms in PDF format with the Office of University Building Official as part of the review submission. Forms are to be incorporated into the specifications or a single manual if no project specifications are provided. Do not provide excel format forms and do not provide forms on the drawings.
- 5) Include a copy of the original completed HECO-6a and -6b in the Project's original files.

STATEMENT OF STRUCTURAL & SPECIAL INSPECTIONS

2021 Code Version
(Revised 01/13/25)

HECO-6a

DATE:

PROJECT TITLE:

PROJECT CODE/ PROJECT #:

A/E OF RECORD:

The following firms and/or individuals (with address and telephone number shown) are designated to perform the Structural & Special Inspections designated below. The firm/ individual has the experience, qualifications, certifications and/or licenses required to perform the functions indicated.

TESTING AND INSPECTION SERVICE

	SPECIAL INSPECTION &		INSPECTION MANAGER		SMOKE CONTROL
	TEST LAB		RDP OF RECORD		TESTING & INSPECTION
Name:		Name:		Name:	
Address:		Address:		Address:	
City/St/Zip		City/St/Zip		City/St/Zip	
Phone:		Phone:		Phone:	

UNIVERSITY REPRESENTATIVES & PROJECT STAFF

	STRUCTURAL OBSERVATION		CONSTRUCTION MANAGER		PROJECT MANAGER
Name:		Name:		Name:	
Address:		Address:		Address:	
City/St/Zip		_			
Phone:		_			

Inspection and/or Testing responsibilities are indicated on the attached list Structural & Special Inspections Schedule, Form HECO-6b. Copies of all test data and reports shall be provided to the A/E of Record and to the University's Project Manager on a timely basis. The Contractor shall be notified of all deficiencies and discrepancies in a timely manner so that corrective action can be taken.

PROFESSIONAL OVERSIGHT AND CERTIFICATION

	STRUCTURA	L						
	ENGINEER OF RE	CORD		RDP	of RECORD		SMOKE C	CONTROL RDP
Name:			Name:			Name:		
Address:			Address:			Address:		
City/St/Zip			City/St/Zip			City/St/Zip		
Phone:			Phone:			Phone:		
	(Signature)	(Date)		(Signature)	(Date)		(Signature)	(Date)

CODE OFFICIAL'S ACCEPTANCE

Approved:	This form is approved by the University Building Official upon acceptance and permitting of the project plans and specifications.
Comments:	
Original to:	University Project Manager
Copies to:	Design Team
	Support Staff
Attachment:	HECO-6b List of Special Inspections

HECO-6b

2021 Code Version Pi (Revised 01/13/25) Pi

					BY			
MATERIAL/ ACTIVITY	<u>TYPE OF INSPECTION</u> (RDP add lines as needed to identify other required items)	THIS PROJ? (Yes)	REFERENCE	SPECIAL INSPECTOR/ TEST LAB	RDP OF RECORD	OTHER:	OTHER:	OTHER:
CONTRATOR	RESPONSIBILITY (see note 8)					Contractor		
Structure	Special inspections for Wind Resistance and/or Seismic resistance.		VCC 1704.6	Х		8		
STRUCTURAL	OBSERVATIONS (see note 7)							
Structure	Structural observations for structures as identified by the structural observer in a written statement.		VCC 1704.6		X (C/P)			
FOUNDATION	S							
Soil	Verify material below shallow foundations are adequate to achieve the design bearing capacity.		VCC T1705.6 #1	X (Periodic)				
Soil	Verify excavation is extended to proper depth and has reached proper material.		VCC T1705.6 #2	X (Periodic)				
Soil Soil	Perform classification and testing of compacted fill materials. During fill placement verify conformance to geotechnical report.		VCC T1705.6 #3 VCC T1705.6 #4	X (Periodic) X				
Soil Helical Pile	Prior to fill, inspect subgrade to verify prepared properly. Install equipment, pile dimensions, tip elevations, final depth, final installation torque and other pertinent installation data.		VCC T1705.6 #5 VCC 1705.9	X (Periodic) X				
Deep Foundations	Reasonable doubt as to the structural integrity.		VCC 1705.10	X	X (C/P)			
Deep Foundations	Verify element materials, sizes and lengths. Determine capacities of test elements and conduct additional load tests.		VCC T1705.7 #1 VCC T1705.7 #2	X X				
Deep Foundations	Inspect driving operations and maintain complete and accurate records.		VCC T1705.7 #3	x				
Deep Foundations Deep Foundations	Record placement and install criteria. For steel elements, perform special inspections per 1705.2		VCC T1705.7 #4 VCC T1705.7 #5	X X				
Deep Foundations	For concrete elements, perform special inspections per 1705.3		VCC T1705.7 #6	X				
Deep Foundations	For specialty elements, perform additional inspections per the RDP.		VCC T1705.7 #7	x				
Cast Deep Fnds	Inspect drilling operations and maintain complete and accurate records.		VCC T1705.8 #1	x				<u> </u>
Cast Deep Fnds Cast Deep Fnds	Record placement and install criteria. For concrete elements, perform special inspections per 1705.3		VCC T1705.8 #2 VCC T1705.8 #3	X X				

HECO-6b

2021 Code Version (Revised 01/13/25)

		REQ'D			INS	PECTION / TEST	ГВҮ	
MATERIAL/	TYPE OF INSPECTION	THIS PROJ?		SPECIAL INSPECTOR/	RDP OF RECORD	OTHER:	OTHER:	OTHER:
ACTIVITY	(RDP add lines as needed to identify other required items)	(Yes)	REFERENCE	TEST LAB				
CONCRETE C	ONSTRUCTION							
Concrete	Reinforcement, including prestressing tendons, verify placement.		VCC T1705.3 #1	X (Periodic)				
Concrete	Reinforcing bar welding.		VCC T1705.3 #2	X, X (Periodic)				1
Concrete	Inspect anchors cast in concrete		VCC T1705.3 #3	X (Periodic)				(
Concrete	Inspect anchors post-installed.		VCC T1705.3 #4	X, X (Periodic)				(
Concrete	Verify use of required design mix		VCC T1705.3 #5	X (Periodic)				
Concrete	Concrete test specimens		VCC T1705.3 #6	Х				
Concrete	Concrete and shotcrete placement for proper application.		VCC T1705.3 #7	Х				
Concrete	Verify maintenance of specified curing temperature and techniques.		VCC T1705.3 #8	X (Periodic)				
Concrete	Prestressed concrete application of forces and grouting.		VCC T1705.3 #9	Х				1
Concrete	Precast concrete member erection.		VCC T1705.3 #10	X (Periodic)				
Concrete	Precast concrete diaphragm connections or reinforcement at joints classified MDE or HDE.		VCC T1705.3 #11	x				
Concrete	Tolerances of precast concrete diaphragm connections.		VCC T1705.3 #12	X (Periodic)				1
Concrete	Verify in-situ concrete strength.		VCC T1705.3 #13	X (Periodic)				(
Concrete	Inspect formwork.		VCC T1705.3 #14	X (Periodic)				1

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Project Title: Project Code/ Project #:

		REQ'D			INS	PECTION / TEST	Г ВҮ	
		THIS		SPECIAL	RDP OF	OTHER:	OTHER:	OTHER:
MATERIAL/	TYPE OF INSPECTION	PROJ?		INSPECTOR/	RECORD			
ACTIVITY	(RDP add lines as needed to identify other required items)	(Yes)	REFERENCE	TEST LAB				
MASONRY CO	NSTRUCTION			Level 1	Level 2	Level 3		
Assurance Level	Indicate Quality Assurance Level (1, 2, 3)		TMS 402 3.1					
Masonry - Verify	Verification of compliance of submittals.		TMS 602 1.6 Table 3	Required	Required	Required		
Masonry - Verify	Verify f'm and f'AAC.		TMS 602 1.6 Table 3	Not Required	Required	Required		
	Verify slump flow and Visual Stability Index for self-consolidating							
Masonry - Verify	grout.		TMS 602 1.6 Table 3	Not Required	Required	Required		
Masonry - Verify	Verfiy f'm and f'AAC, for every 5,000 sq.ft.		TMS 602 1.6 Table 3	Not Required	Not Required	Required		
Masonry - Verify	Verify proportions as delivered to the project site.		TMS 602 1.6 Table 3	Not Required	Not Required	Required		
Masonry - Inspect	1a Proportions of site-prepared mortar.		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	1b Grade and size of prestressing tendons and anchorage.		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
	1c Grade, type and size of reinforcement, connectors, anchor							
Masonry - Inspect	bolts, and prestresssing tendons and anchorage.		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	1d Prestressing technique		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	1e Properties of thin-bed mortar for AAC masonry		TMS 602 1.6 Table 4	Not Required	C/P	Continuous		
Masonry - Inspect	1f sample panel construction		TMS 602 1.6 Table 4	Not Required	Periodic	Continuous		
Masonry - Inspect	2a Grout Space		TMS 602 1.6 Table 4	Not Required	Periodic	Continuous		
Masonry - Inspect	2b Placement of prestressing tendons and anchorages		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	2c Placement of reinforcement, connectors, and anchor bolts		TMS 602 1.6 Table 4	Not Required	Periodic	Continuous		
	2d Proportions of site-prepared grout and prestressing grout for				Deviedie	Devientie		
Masonry - Inspect	bonded tendons.		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	3a Materials and procedures with the approved submittals		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	3b Placement of masonry units and mortar joint construction		TMS 602 1.6 Table 4	Not Required	Periodic	Periodic		
Masonry - Inspect	3c Size and location of structural members			Not Required	Periodic	Periodic		
	3d Type, size, and location of anchors, including other details of							
	anchorage of masonry to structural members, frames, or other				Periodic	Continuous		
Masonry - Inspect	construction.		TMS 602 1.6 Table 4	Not Required				
Masonry - Inspect	3e Welding of reinforcement		TMS 602 1.6 Table 4	Not Required	Continuous	Continuous		
	3f Preparation, construction, and protection of masonry during				Periodic	Periodic		
Masonry - Inspect	cold or hot weather (<40F or >90F)		TMS 602 1.6 Table 4	Not Required	Periodic	Penodic		
Masonry - Inspect	3g Application and measurement of prestressing force.		TMS 602 1.6 Table 4	Not Required	Continuous	Continuous		
	3h Placement of grout and prestressing grout for bonded tendons				Continuous	Continuous		
Masonry - Inspect	is in compliance.		TMS 602 1.6 Table 4	Not Required	Continuous	Continuous		
	3i Placement of AAC masonry units and construction of thin-				C/P	Continuous		
Masonry - Inspect	bed mortar joints.		TMS 602 1.6 Table 4	Not Required	U/F	Continuous		
	4 Observe preparation of grout specimens, mortar specimens,					Continuous		
Masonry - Inspect	and/or prisms.		TMS 602 1.6 Table 4	Not Required	Periodic	Continuous		
Glass Unit	Glass unit masonry and masonry veneer in Risk Category IV		VCC 1705.4.1					
Vertical Masonry	Vertical masonry foundation elements		VCC 1705.4.2					

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MATERIAL/	TYPE OF INSPECTION	THIS PROJ?		SPECIAL INSPECTOR/	RDP OF RECORD	OTHER:	OTHER:	OTHER:
ACTIVITY	(RDP add lines as needed to identify other required items)	(Yes)	REFERENCE	TEST LAB				
STEEL CONS	TRUCTION							
abricator	Quality Control Inspection Of Shop		VCC 1704.2.5	X (Periodic)	2			
iteel	Welding		AISC 360-16 N5.1	X (Periodic)				
Steel	High Strength Bolting		AISC 360-16 N5.1	X (Periodic)				
Steel	Galvanized structural steel		AISC 360-16 N5.1	X (Periodic)				
Decking	Cold Form Steel Decking		VCC 1705.2.2	X (Periodic)				
oist	1a open web joist and joist girders end connections.		VCC T1705.2.3	X (Periodic)	2			
oist	1b1 open web joist and joist girder standard bridging.		VCC T1705.2.3	X (Periodic)	2			
oist	1b2 open web joist and joist girder other bridging.		VCC T1705.2.3	X (Periodic)	2			
russes	Cold form steel trusses, span >60 feet		VCC 1705.2.4	X (Periodic)	2			
WOOD CONS	TRUCTION							
Vood	Wood material labeling		VCC 1703.5	X (Periodic)	2			
Vood	Quality Control Inspection Of Shop Fabrication		VCC 1704.2.5	X (Periodic)	2			
Vood	High-load Diaphragms		VCC 1705.5.1	X (Periodic)				
Vood-Trusses	Metal-plate connected wood trusses, span >60 feet		VCC 1705.5.2	X (Periodic)	2			
/lass Timber	Anchorage and connections to timber deep foundation systems		VCC T1705.5.3	X (Periodic)				
/lass Timber	Inspect erection of mass timber construction		VCC T1705.5.3	X (Periodic)				
	Inspect connections where installation methods are required to							
lass Timber	meet design loads - Threaded connections		VCC T1705.5.3	X (Periodic)				
/ass Timber	Inspect connections where installation methods are required to meet design loads - adhesive anchors - sustained tension loads		VCC T1705.5.3	X (Continuous)				
	Inspect connections where installation methods are required to			, (containabato)				
<i>l</i> lass Timber	meet design loads - other adhesive anchors		VCC T1705.5.3	X (Periodic)				
/lass Timber	Inspect connections where installation methods are required to meet design loads - bolted connections		VCC T1705.5.3	X (Periodic)				
/lass Timber	Inspect connections where installation methods are required to meet design loads - concealed connections.		VCC T1705.5.3	X (Periodic)				
Sealing	Sealants or adhesives where required by section 703.7		VCC 1705.20	X (Periodic)				

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MATERIAL/	TYPE OF INSPECTION	THIS PROJ?		SPECIAL INSPECTOR/	RDP OF RECORD	OTHER:	OTHER:	OTHER:
ACTIVITY	(RDP add lines as needed to identify other required items)	(Yes)	REFERENCE	TEST LAB				
WIND FORCE	RESISTANCE							
Wind exposure ca	ategory B, where V >=150 mph or Wind exposure catego	ry C or E), where V >= 140 m	ıph.				
	Field gluing, nailing, bolting, anchoring, and other fastening of MWFRS, including wood shear walls, wood diaphragms, drag		NOO 1705 10 1	X (5(0))				
Wood	struts, braces, and hold downs. Welding, screw attachment of MWFRS, including shear walls,		VCC 1705.12.1	X (P/C)			┦────┦	j
Cold Formed Steel	braces, diaphragms, collectors, and hold downs.		VCC 1705.12.2	X (Periodic)				
Components	Fastening of the roof covering, roof deck, roof framing connections, exterior wall covering, and wall connections to roof and floor diaphragms and framing.		VCC 1705.12.3	X (Periodic)				
							4	
SEISMIC RESIS	STANCE	<u> </u>					<u> </u>	
Steel	Steel in SFRS for SDC B,C,D,E, or F.		VCC 1705.13.1.1	X (Periodic)				
Steel	Steel in SFRS for SDC B,C,D,E, or F other than above		VCC 1705.13.1.2	X (Periodic)			<u>↓</u>	
Wood	Wood in SFRS for SDC C, D, E, or F		VCC 1705.13.2	X (P/C)			<u>↓</u>	
Cold Formed Steel	Cold Formed Steel for SDC C, D, E, or F		VCC 1705.13.3	X (Periodic)				
Designated systems	For SDC C,D,E, or F designated seismic systems requiring qualification in accordance with 13.2.2 of ASCE 7 shall be inspected to verify label, anchorage and mounting conform to the certificate of compliance.		VCC 1705.13.4	X (Periodic)				
Architectural	Inspection is required for erection and fastening of cladding, interior and exterior nonbearing walls and interior/ exterior veneer in SDC D, E, F.		VCC 1705.13.5	X (Periodic)				
Access Floors	Anchorage of access floors in SDC D, E, or F.		VCC 1705.13.5.1	X (Periodic)				
MEP components	Inspection of anchorage depending on application, SDC C,D,E, or F.		VCC 1705.13.6	X (Periodic)				
Storage Racks	Materials used, to verify compliance with one or more of the material test reports in accordance with construction documents. SDC D,E, or F.		VCC T1705.13.7 #1	X (Periodic)				
Storage Racks	Fabricated storage rack elements SDC D,E, or F.		VCC T1705.13.7 #2	X (Periodic)			╉─────┩	
Storage Racks	Storage rack anchorage installation.		VCC T1705.13.7 #3	X (Periodic)			╂────┤	[
Storage Racks	Completed system, to indicate compliance with construction docs.		VCC T1705.13.7 #4	X (Periodic)			<u>+</u> ────	
Isolation Systems	Systems in seismically isolated structures in SDC B,C,D,E or F		VCC 1705.13.8	X (Periodic)			tt	
Cold Formed Steel	Cold Formed Steel special bolted moment frames SDC D, E, F		VCC 1705.13.9	X (Periodic)			tt	
Testing	Structural Steel SDC B, C, D, E, F		VCC 1705.14.1	X (Periodic)			+ + + + + + + + + + + + + + + + + + + +	
Testing	Nonstructural Components SDC B, C, D, E, F		VCC 1705.14.2	, <i>,</i> ,	2		1 1	
Testing	Designated Seismic Systems SDC C, D, E, F		VCC 1705.14.3		2		tt	
Testing	Seismic Isolation Systems SDC B, C, D, E, F		VCC 1705.14.4	X (Periodic)			†	1
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		REQ'D			Г ВҮ			
MATERIAL/ <u>TYPE OF INSPECTION</u> ACTIVITY (RDP add lines as needed to identify other required items)	THIS PROJ? (Yes)	REFERENCE	SPECIAL INSPECTOR/ TEST LAB	RDP OF RECORD	OTHER:	OTHER:	OTHER:	
FIREPROOFIN			-					
Spray-on	Physical and Visual Tests		VCC 1705.15.1	Х			[<u> </u>
Spray-on	Surface Conditions		VCC 1705.15.2	Х				
Spray-on	Application		VCC 1705.15.3	Х				
Spray-on	Thickness		VCC 1705.15.4	Х				
Spray-on	Density		VCC 1705.15.5	Х				
Spray-on	Bond Strength		VCC 1705.15.6	Х				
Mastic/ Intumescent	Mastic and Intumescent Fire-Resistant Coatings		VCC 1705.16	Х				
	ULATION & FINISH SYSTEMS (EIFS)							
Coating	Water-Resistive Barrier Coating		VCC 1705.17.1	X				
Materials	Manufacturer's Data		Specifications	X (C/P)				<u> </u>
Preparation	Condition Of Substrate		Specifications	X (C/P)				<u> </u>
Application	Methods, Proportions & Thickness of Installation		Specifications	X (C/P)				
SMOKE CONT	ROL (see note 5)		I	SMOKE CONTROL				
Testing	Testing for Smoke Control		VCC 1705.19	Х				
Ducts	Device Location and Air Duct Leakage		Specifications	X (C/P)				
System	Pressure Difference, Flow Measurements & Detection Testing		Specifications	X (C/P)				
Controls	Control Verification, Activation Sequence		Specifications	X (C/P)				
								<u> </u>

2021 Code Version (Revised 01/13/25) Project Code/ Project #:

REQ'D **INSPECTION / TEST BY** THIS RDP OF OTHER: OTHER: OTHER: SPECIAL MATERIAL/ TYPE OF INSPECTION PROJ? RECORD INSPECTOR/ (Yes) ACTIVITY (RDP add lines as needed to identify other required items) REFERENCE TEST LAB

NOTES:

1. Fabricator, supplier, ready-mixed plant or other production plant shall provide certificates from an approved independent inspection, testing or quality assurance agency attesting that the plant meets at least one of the following criteria:

- a. The plant is a certified production plant meeting the quality assurance standards of a recognized national standards organization for that product.
- b. The plant maintains an agreement with an independent inspection or quality assurance agency to conduct periodic in-plant quality assurance inspections. The frequency of these inspections shall not be less than one every six months.
- c. The plant has an in-shop quality assurance inspection program by an independent testing or quality assurance agency for the work/ product to be provided on this project.
- 2. A/E shall review fabricator/ supplier/ producer certificates for conformance or compliance with appropriates.
- 3. Contractor/ supplier shall submit manufacturer's certificates of compliance for the materials/ products as required by VCC 1704.5.
- 4. A/E shall review records and test results of all special inspections for conformance with requirements.
- 5. Special Inspection firm shall have expertise in fire protection engineering, mechanical engineering, and certification as an air balancer. The special inspector listed on the cover page and the Agency are responsible for verifying that the inspector(s) for smoke control is qualified as required by VCC 1705.19.2.
- 6. Unless noted otherwise, the reference numbers listed refer to the 2021 VCC and testing frequency is to be continuous.
- 7. The Owner's structural observer shall submit a written statement to OUBO identifying the frequency and extent of structural observations as required by VCC 1704.6.
- 8. VCC 1704.3 requires special inspections for seismic or wind resistance. This statement of inspections shall identify systems or components that are subject to such special inspections or tests in accordance with VCC 1704.3.2 and 1704.3.3. The contractor shall complete, sign and submit the written statement of responsibility in HECO-6c prior to the commencement of work in acknowledgment of awareness of the special inspections as required by VCC 1704.4.