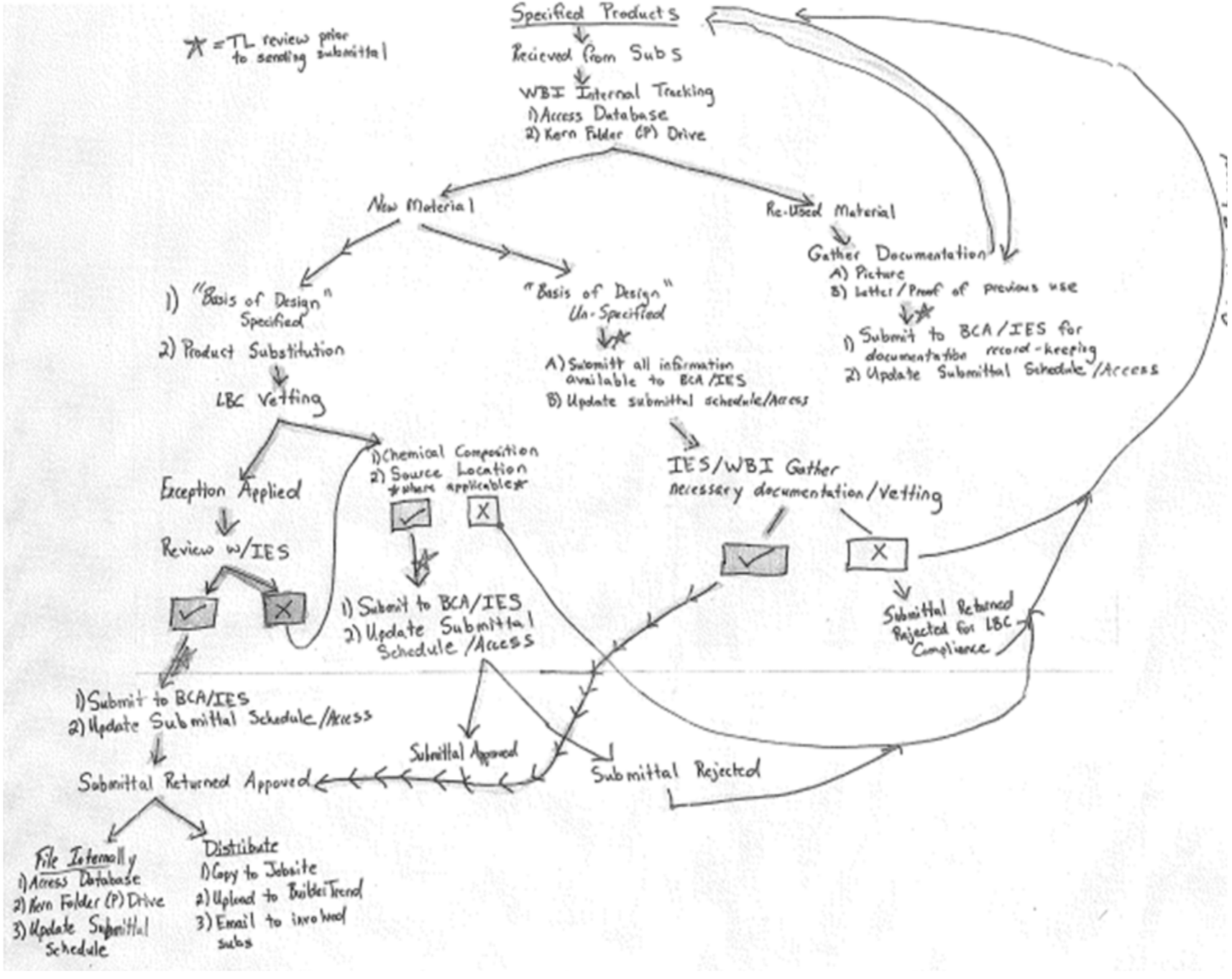
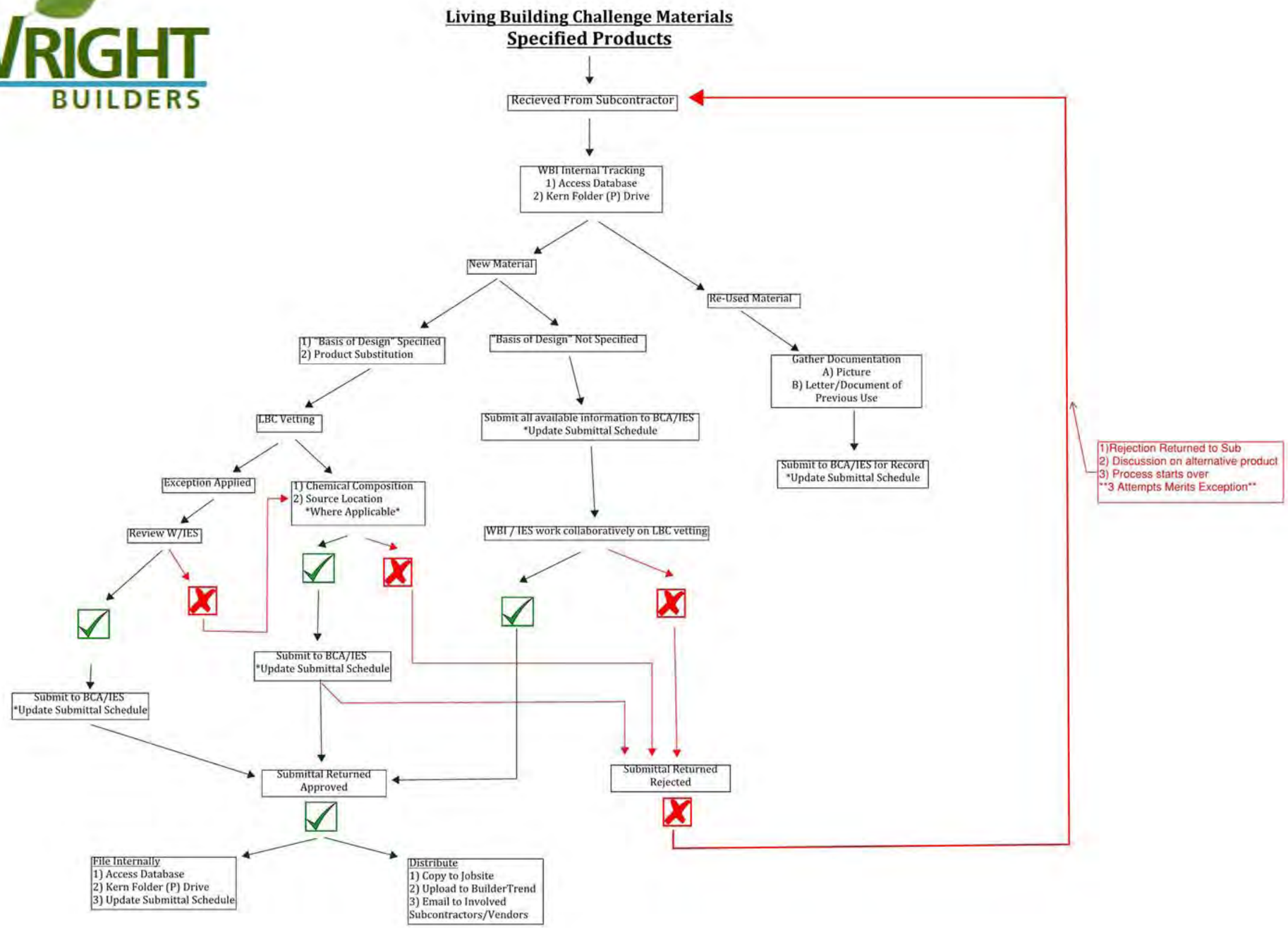
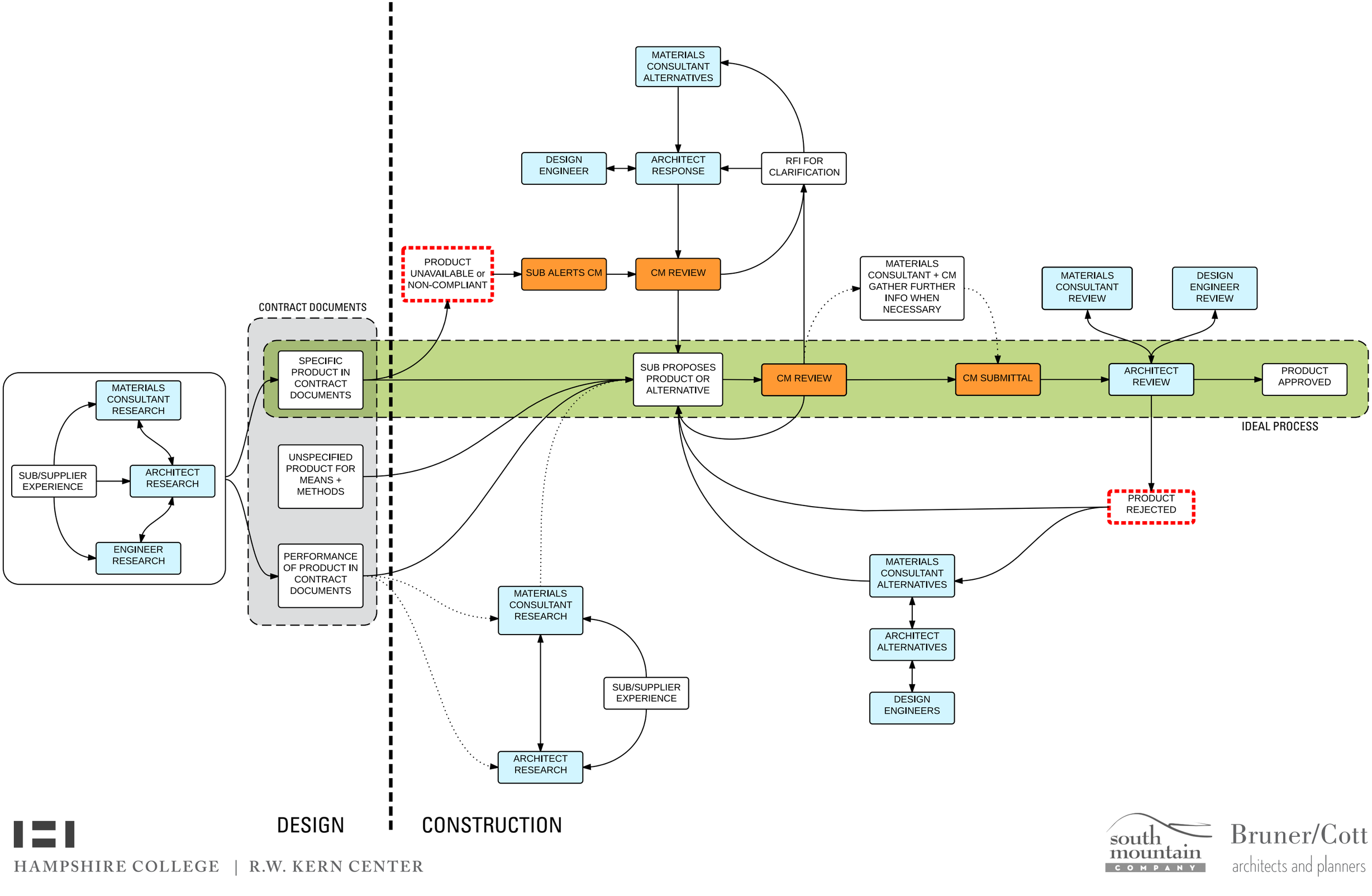

★ = TL review prior to sending submittal
Specified Products
Recieved from Subs
WBI Internal Tracking
1) Access Database
2) Kern Folder (P) Drive
New Material
Re-Used Material
1) "Basis of Design" Specified
2) Product Substitution
LBC Vetting
Exception Applied
Review w/IES
"Basis of Design" Un-Specified
A) Submitt all information available to BCA/IES
B) Update submittal schedule/Access
Gather Documentation
A) Picture
B) Letter/Proof of previous use
1) Submit to BCA/IES for documentation record-keeping
2) Update Submittal Schedule/Access
1) Chemical Composition
2) Source Location *where applicable*
1) Submit to BCA/IES
2) Update Submittal Schedule/Access
IES/WBI Gather necessary documentation/Vetting
Submittal Returned Rejected for LBC Compliance
1) Submit to BCA/IES
2) Update Submittal Schedule/Access
Submittal Approved
Submittal Rejected
Submittal Returned Approved
File Internally
1) Access Database
2) Kern Folder (P) Drive
3) Update Submittal Schedule
Distribute
1) Copy to Jobsite
2) Upload to BuilderTrend
3) Email to involved subs

WRIGHT BUILDERS

Living Building Challenge Materials
Specified Products




MATERIALS CONSULTANT ALTERNATIVES
DESIGN ENGINEER
ARCHITECT RESPONSE
RFI FOR CLARIFICATION
PRODUCT UNAVAILABLE or NON-COMPLIANT
SUB ALERTS CM
CM REVIEW
MATERIALS CONSULTANT + CM GATHER FURTHER INFO WHEN NECESSARY
MATERIALS CONSULTANT REVIEW
DESIGN ENGINEER REVIEW
CONTRACT DOCUMENTS
SPECIFIC PRODUCT IN CONTRACT DOCUMENTS
SUB PROPOSES PRODUCT OR ALTERNATIVE
CM REVIEW
CM SUBMITTAL
ARCHITECT REVIEW
PRODUCT APPROVED
IDEAL PROCESS
MATERIALS CONSULTANT RESEARCH
SUB/SUPPLIER EXPERIENCE
ARCHITECT RESEARCH
ENGINEER RESEARCH
UNSPECIFIED PRODUCT FOR MEANS + METHODS
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PRODUCT REJECTED
MATERIALS CONSULTANT ALTERNATIVES
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ARCHITECT RESEARCH
DESIGN
CONSTRUCTION

MATERIALS CONSULTANT ALTERNATIVES

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UNSPECIFIED PRODUCT FOR MEANS + METHODS

PERFORMANCE OF PRODUCT IN CONTRACT DOCUMENTS

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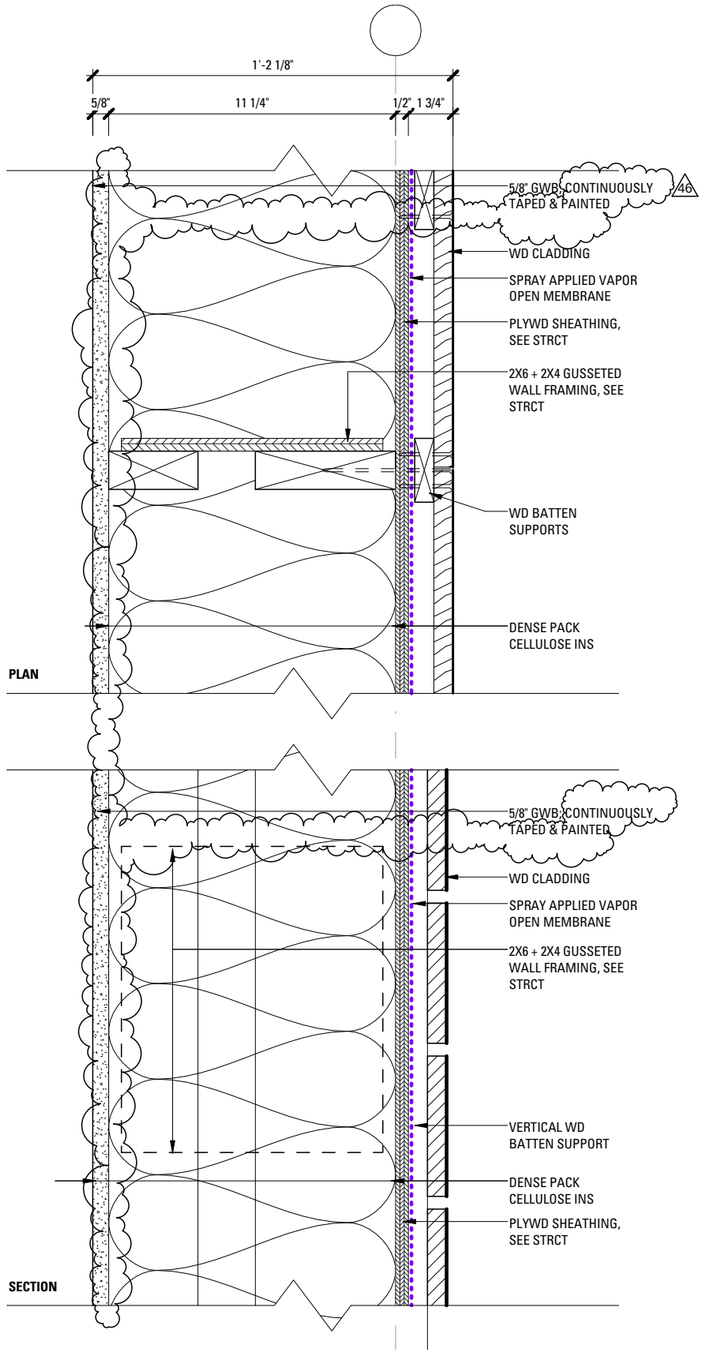
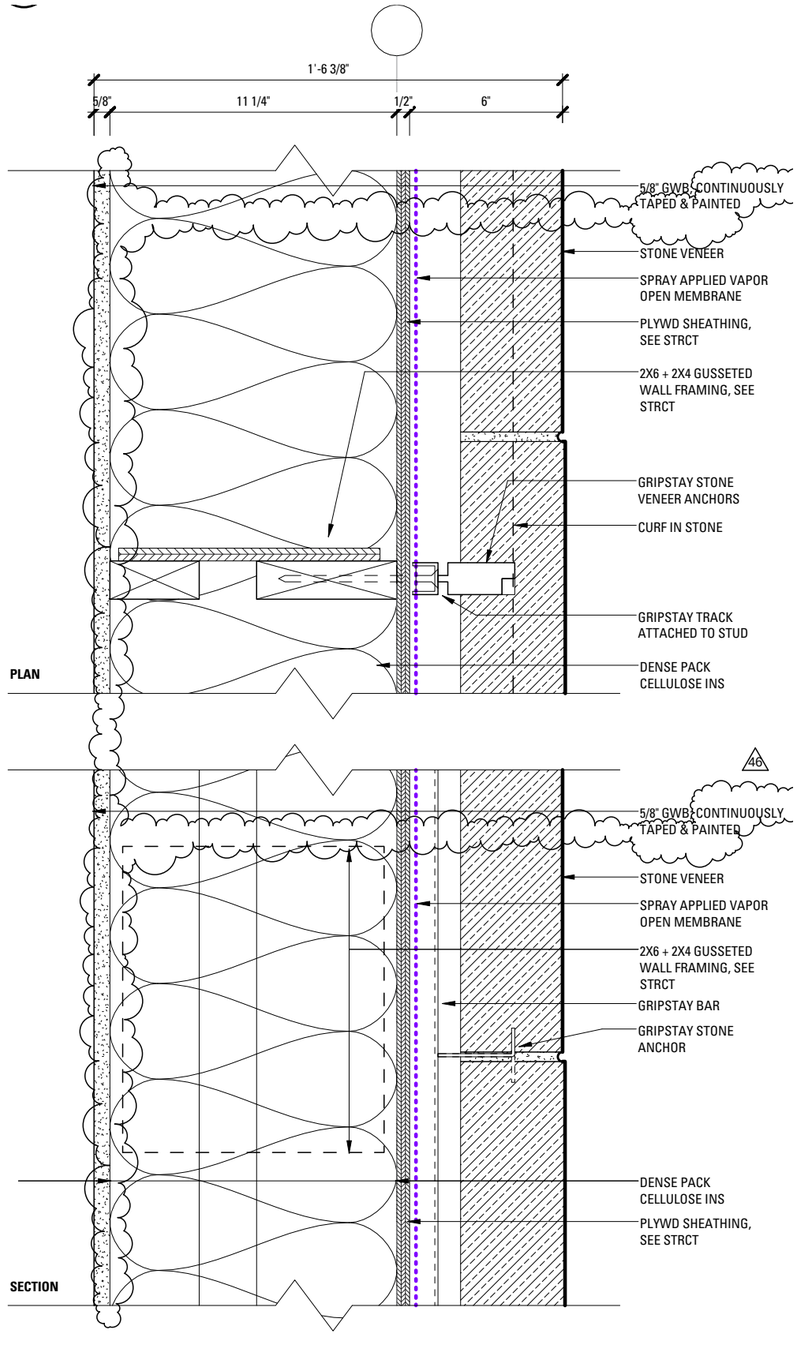
ARCHITECT ALTERNATIVES

DESIGN ENGINEERS

DESIGN

CONSTRUCTION


1'-2 1/8"
5/8"
11 1/4"
1/2"
1 3/4"
5/8" GWB, CONTINUOUSLY TAPED & PAINTED
46
WD CLADDING
SPRAY APPLIED VAPOR OPEN MEMBRANE
PLYWD SHEATHING, SEE STRCT
2X6 + 2X4 GUSSETED WALL FRAMING, SEE STRCT
WD BATTEN SUPPORTS
DENSE PACK CELLULOSE INS
PLAN
5/8" GWB, CONTINUOUSLY TAPED & PAINTED
WD CLADDING
SPRAY APPLIED VAPOR OPEN MEMBRANE
2X6 + 2X4 GUSSETED WALL FRAMING, SEE STRCT
VERTICAL WD BATTEN SUPPORT
DENSE PACK CELLULOSE INS
PLYWD SHEATHING, SEE STRCT
SECTION


1'-6 3/8"
5/8"
11 1/4"
1/2"
6"
5/8" GWB, CONTINUOUSLY TAPED & PAINTED
STONE VENEER
SPRAY APPLIED VAPOR OPEN MEMBRANE
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GRIPSTAY STONE VENEER ANCHORS
CURF IN STONE
GRIPSTAY TRACK ATTACHED TO STUD
DENSE PACK CELLULOSE INS
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46
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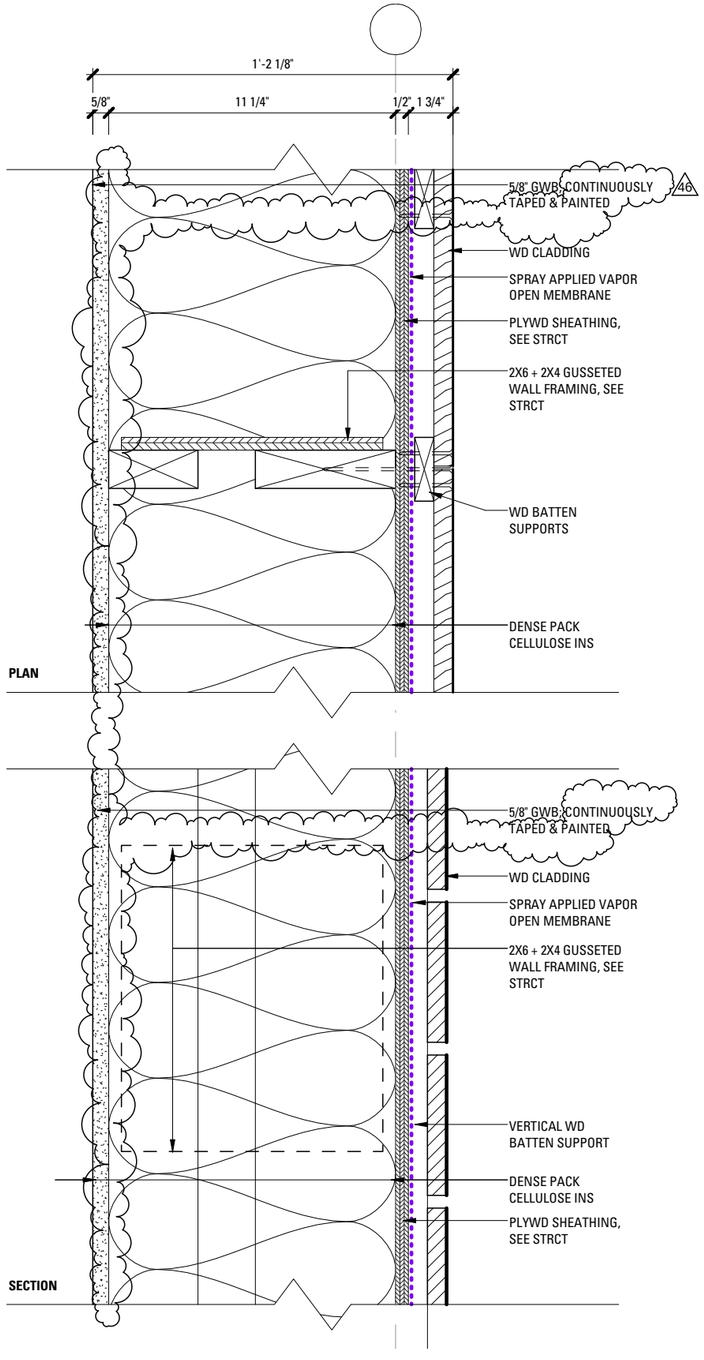
2X6 + 2X4 GUSSETED WALL FRAMING, SEE STRCT
GRIPSTAY BAR
GRIPSTAY STONE ANCHOR
DENSE PACK CELLULOSE INS
PLYWD SHEATHING, SEE STRCT
SECTION



SECTION 1405
INSTALLATION OF WALL COVERINGS

1405.1 General. *Exterior wall coverings* shall be designed and constructed in accordance with the applicable provisions of this section.

1405.2 Weather protection. *Exterior walls* shall provide weather protection for the building. The materials of the minimum nominal thickness specified in Table 1405.2 shall be acceptable as *approved* weather coverings.

1405.3 Vapor retarders. Class I or II vapor retarders shall be provided on the interior side of frame walls in Zones 5, 6, 7, 8 and Marine 4.

Exceptions:

1. Basement walls.
2. Below-grade portion of any wall.
3. Construction where moisture or its freezing will not damage the materials.

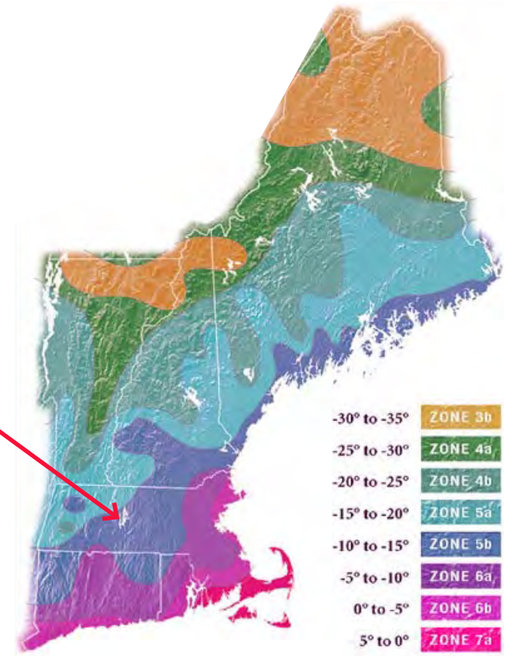
1405.3.1 Class III vapor retarders. Class III vapor retarders shall be permitted where any one of the conditions in Table 1405.3.1 is met.

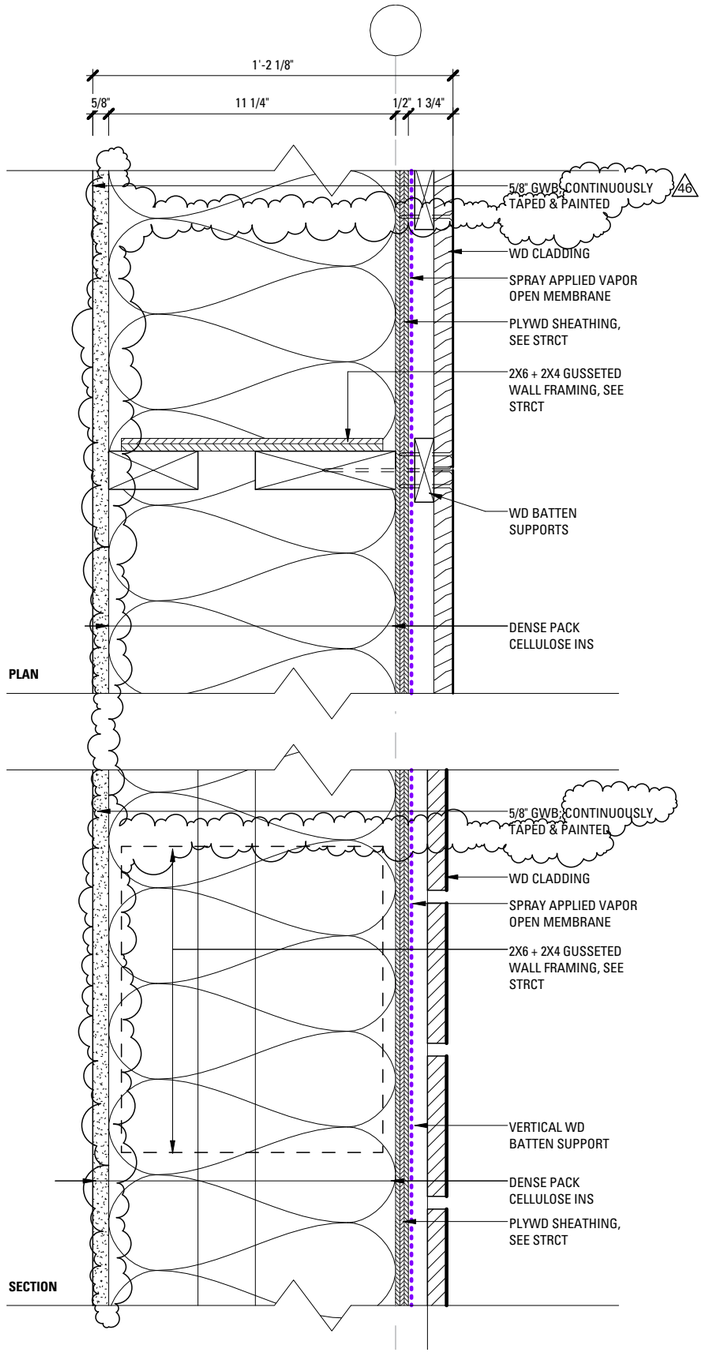
TABLE 1405.3.1
CLASS III VAPOR RETARDERS

ZONE	CLASS III VAPOR RETARDERS PERMITTED FOR:[a]
Marine 4	Vented cladding over OSB Vented cladding over plywood Vented cladding over fiberboard Vented cladding over gypsum Insulated sheathing with *R*-value ≥ R2.5 over 2×4 wall Insulated sheathing with *R*-value ≥ R3.75 over 2×6 wall
5	Vented cladding over OSB Vented cladding over plywood Vented cladding over fiberboard Vented cladding over gypsum Insulated sheathing with *R*-value ≥ R5 over 2×4 wall Insulated sheathing with *R*-value ≥ R7.5 over 2×6 wall
6	Vented cladding over fiberboard Vented cladding over gypsum Insulated sheathing with *R*-value ≥ R7.5 over 2×4 wall Insulated sheathing with *R*-value ≥ R11.25 over 2×6 wall
7 and 8	Insulated sheathing with *R*-value ≥ R10 over 2×4 wall Insulated sheathing with *R*-value ≥ R15 over 2×6 wall

For SI: 1 pound per cubic foot = 16 kg/m³.

a. Spray foam with a minimum density of 2 lbs/ft³ applied to the interior cavity side of OSB, plywood, fiberboard, insulating sheathing or gypsum is deemed to meet the insulating sheathing requirement where the spray foam *R*-value meets or exceeds the specified insulating sheathing *R*-value.





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1405.3.2 Material vapor retarder class. The *vapor retarder class* shall be based on the manufacturer's certified testing or a tested assembly.

The following shall be deemed to meet the class specified:

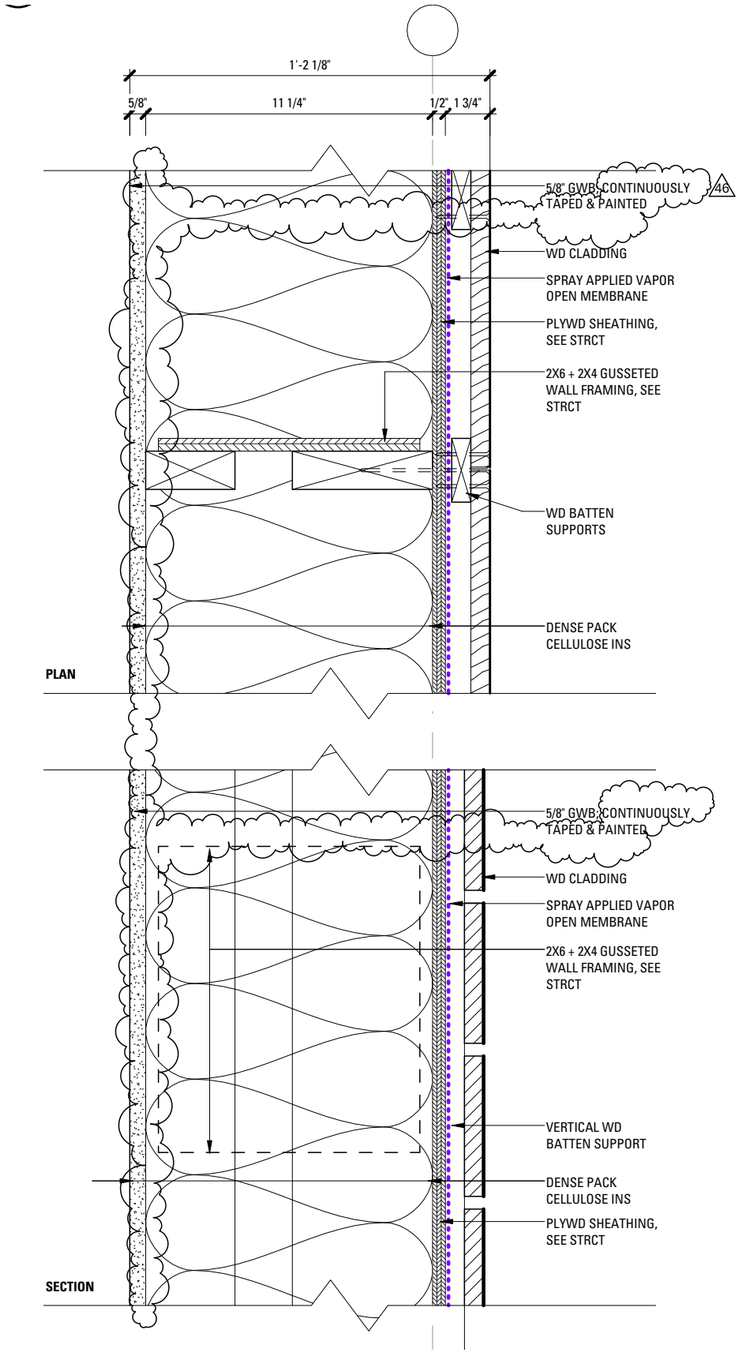
Class I: Sheet polyethylene, nonperforated aluminum foil

Class II: Kraft-faced fiberglass batts or paint with a perm rating greater than 0.1 and less than or equal to 1.0

Class III: Latex or enamel paint

1405.3.3 Minimum clear airspaces and vented openings for vented cladding. For the purposes of this section, vented cladding shall include the following minimum clear airspaces.

1. Vinyl lap or horizontal aluminum siding applied over a weather-resistive barrier as specified in this chapter.
2. Brick veneer with a clear airspace as specified in this code.
3. Other *approved* vented claddings.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5/8"
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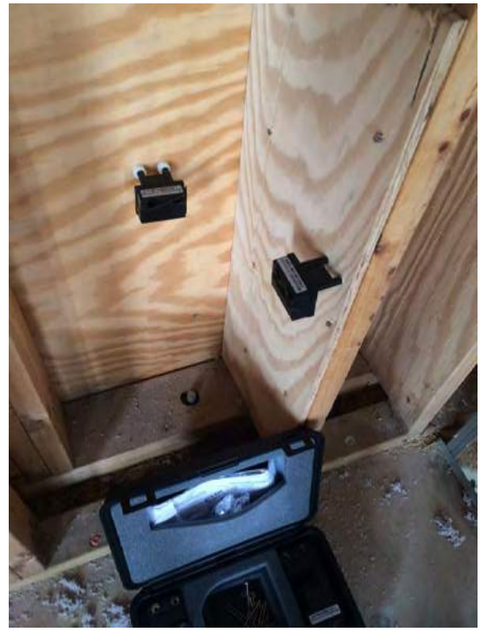
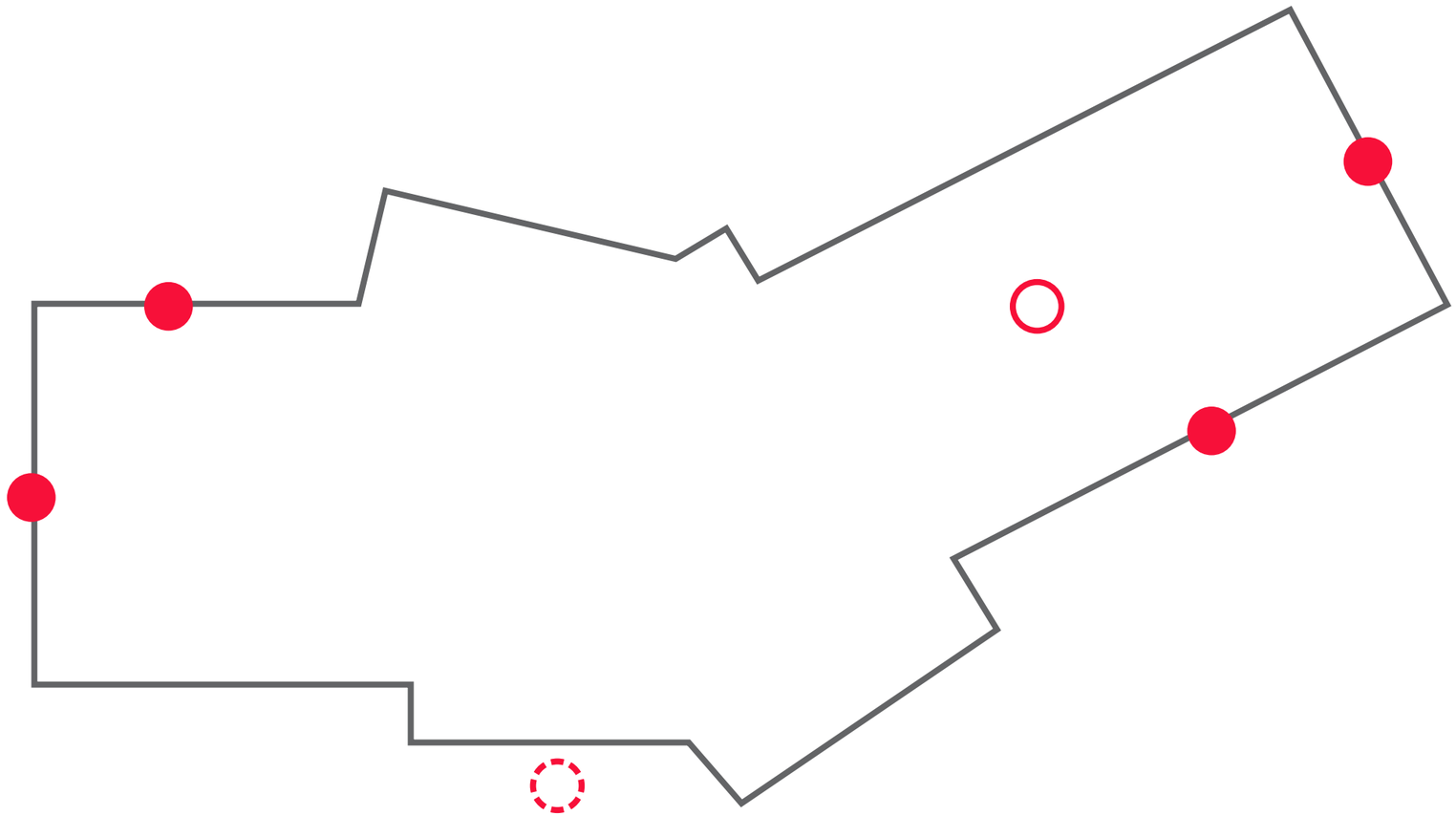
SECTION


Property of Bruner / Cott
Before moving please
call Christopher Nielson at 617-492-8400
OmniSense
Data Acquisition Gateway
G-3 Series
www.omnisense.com



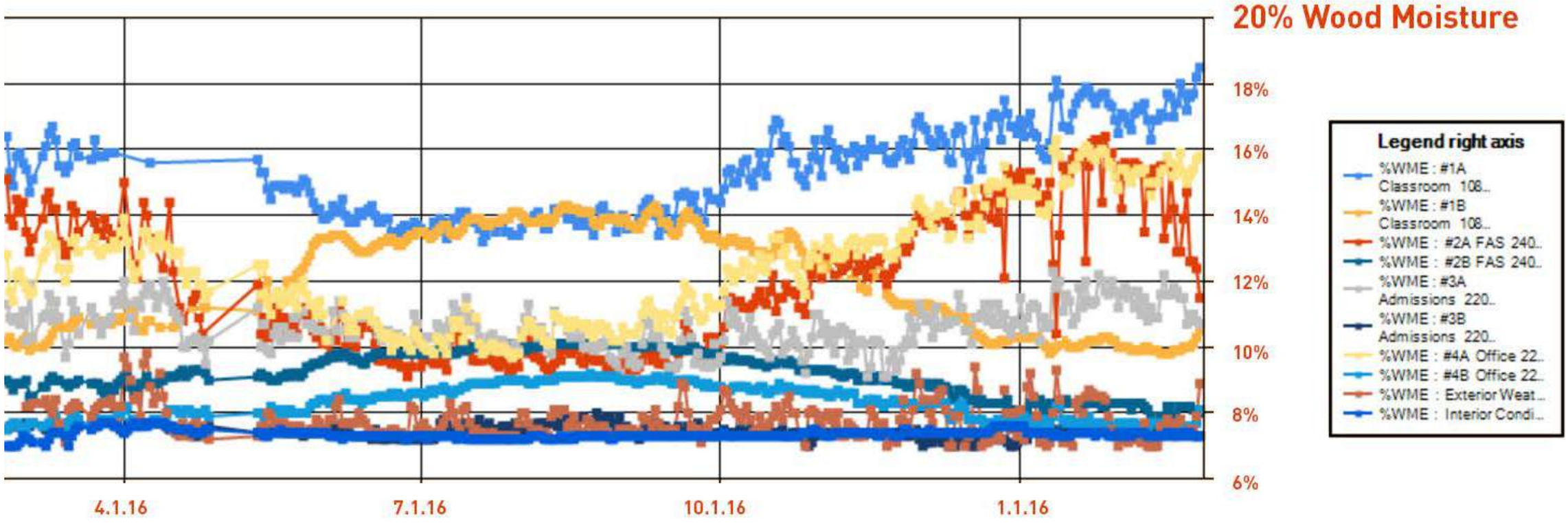
ENVELOPE MOISTURE

Sensor Locations



ENVELOPE MOISTURE

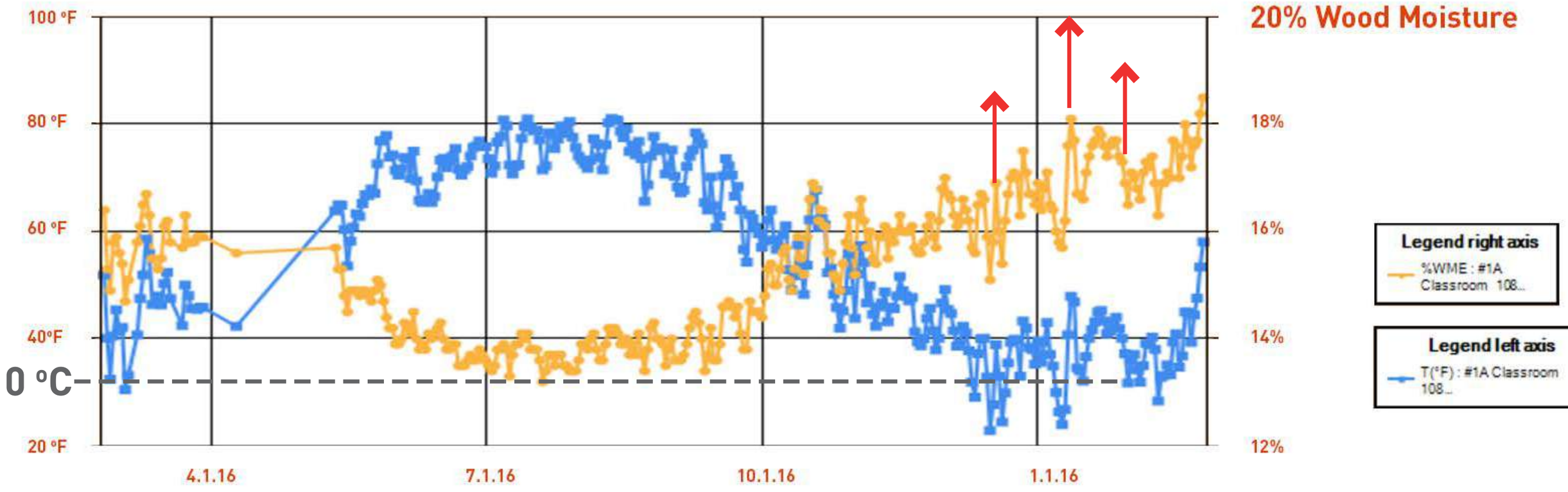
% Wood Moisture Content



ENVELOPE MOISTURE

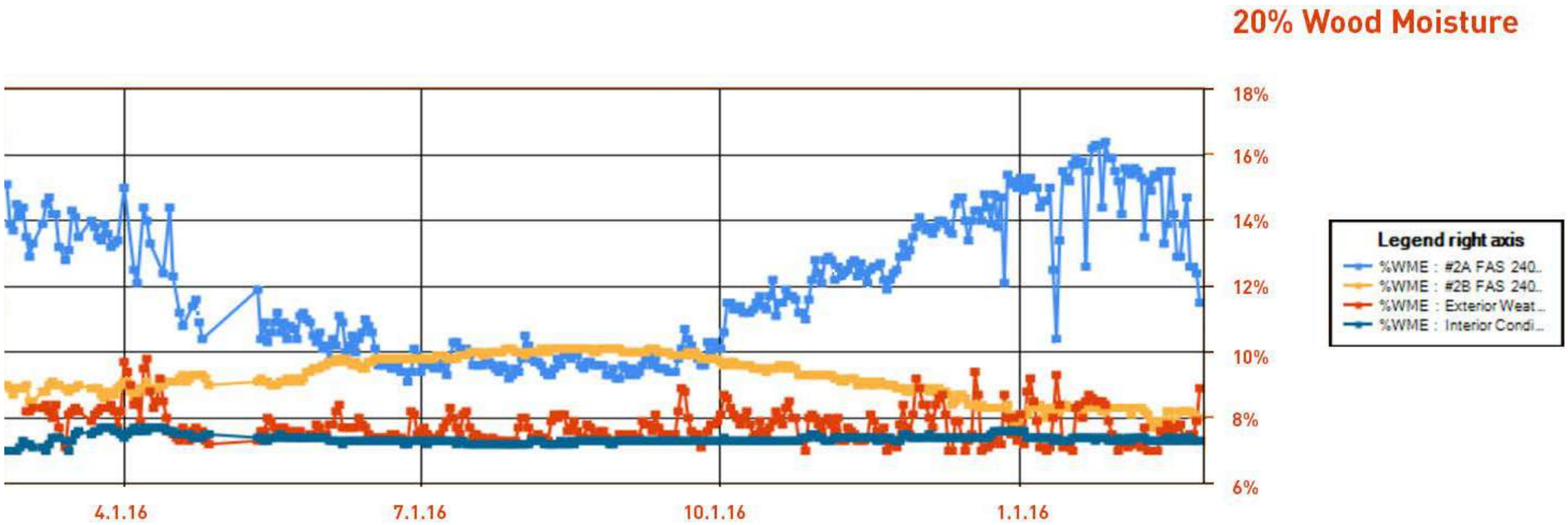
Calibrate for Temperature

"...add 1/2% for every 5 °C below 20°C..."



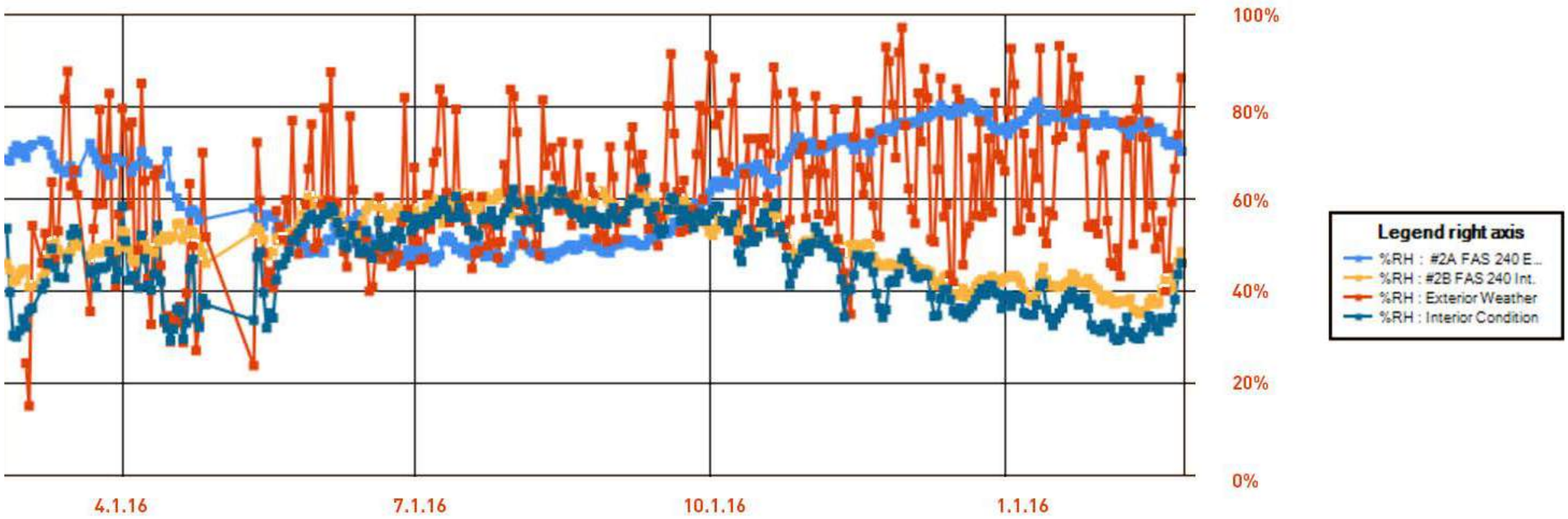
ENVELOPE MOISTURE

Financial Aid Suite



ENVELOPE MOISTURE

Relative Humidity



ENERGY MODEL

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- Heating was post-processed with an estimated COP

PRE-PROCESSING LIGHTING ENERGY

	Area	W/sf	Hours/wk	kWh, lights full on	% daylit area	% daylight available	Potential % daylit	Occupancy factor	Total factor	kWh after daylight
Admissions	3,860	0.7	60	8,430	80%	60%	48%	70%	36%	3,069
Hampstore	2,400	1.1	60	8,237	10%	60%	6%	100%	94%	7,743
NSP	465	0.7	60	1,016	60%	60%	36%	85%	54%	552
Living	500	0.7	60	1,092	70%	60%	42%	100%	58%	633
Lobby/Gallery/coffee	3,500	0.5	90	8,190	50%	45%	23%	100%	78%	6,347
SLS	1,600	0.7	90	5,242	50%	45%	23%	75%	58%	3,047
Info	790	0.7	90	2,588	70%	45%	32%	80%	55%	1,418
	13,115			*34,794*						***22,809***

PRE-PROCESSING PLUG LOADS

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- Similar to lighting

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- W/sf continuous for each space (copiers, printers, etc.)

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- W for café, Clivus, rainwater pump, effluent pump, UV water treatment, miscellaneous

PRE-PROCESSING PLUG LOADS

- Similar to lighting
- W/sf continuous for each space (copiers, printers, etc.)
- W/person based on occupancy type and schedule
- W for café, Clivus, rainwater pump, effluent pump, UV water treatment, miscellaneous
- Energy usage for ERVs calculated based on occupancy and wattage of each unit