

APPENDIX A. FULL FLOOD SIMULATION RESULTS

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A.1 Observations From Flood Simulation 1

Date	Time	Flooding Simulated Depth (in)	Test Pod A Interior Water Depth (in)	Test Pod B Interior Water Depth (in)	Test Pod C Interior Water Depth (in)	Test Pod D Interior Water Depth (in)	Test Pod E Interior Water Depth (in)	Test Pod F Interior Water Depth (in)
6-Apr	7:00 AM	0	0	0	0	0	0	0
	7:30 AM	5.5	0	0	0	0 <i>seepage at base of wall</i>	1.25	0 <i>leakage at channel connection N. wall</i>
	8:00 AM	10.5	0	0	<i>seepage at base of east wall</i>	0	4	0.75 visible currents
	8:45 AM	17	0	0	0.3	0	14	2 <i>three points of leakage</i>
	9:00 AM	20.5	0 <i>most CMU cells dry, minor seepage</i>	0 <i>most CMU cells filling w/ water (audible)</i>	1.5	0.5	21	2.5
	10:00 AM	30	0	0.75	2.75	1	24	4
	11:00 AM	36	0	4	9.5	1.75	36	7
	12:00 PM	36	0	8.25	17	2.25	36	21.5
	1:00 PM	33	0	11.5	21.5	2.75	33	33.5
	3:00 PM	36	0	18.5	26.5	3.75	36	36
	4:00 PM	36	0	22	28.5	4.25	36	36
	5:00 PM	36	0	24	29.75	4.75	36	36
	6:00 PM	36	<i>slab is half covered with water</i>	27	31	5.25	36	<i>Floated away from base</i>
	7:00 PM	36	0	29.25	31.5	5.75	36	0
	8:00 PM	36	0	31	32	6	36	0
	9:00 PM	36	0	32.5	32.5	6.25	36	0
	10:00 PM	36	0	33.75	33	6.5	36	0
	11:00 PM	36	0	34.5	33.5	7	36	0
7-Apr	1:00 AM	36	0	35.5	34.5	7.75	36	0
	3:00 AM	36	0	36.5	35.5	8.25	36	0
	5:05 AM	38	0	36.5	35.5	8.25	36	0
	7:05 AM	38	0	36.5	35.5	8.25	36	0
	9:05 AM	<i>Missing data</i>						
	11:00 AM	29.5	0.25	34.5	35	10	29.5	0
	12:00 PM	24.5	0.25	32.5	33	10	25	0
	1:00 PM	19.5	0.25	30.25	30.75	10.5	20	0
	2:00 PM	16	0.25	29	28.75	10.5	16.5	0
	3:00 PM	13	0.25	28.5	27	10.5	13.5	0
	4:00 PM	9	0.25	27.25	25.5	10.5	10	0
	5:00 PM	5	0.25	26.5	24.75	10.5	6.5	0
	7:05 PM	2	0.25	24.5	21.5	10	2.75	0
8-Apr	8:00 AM	0	0.25	18.75	14.5	8	0	0
	12:00 PM	0	0.25	17.75	13.25	7.25	0	0

Table 6. Observations from flood simulation 1.

A.2 Data Set From Drying Period

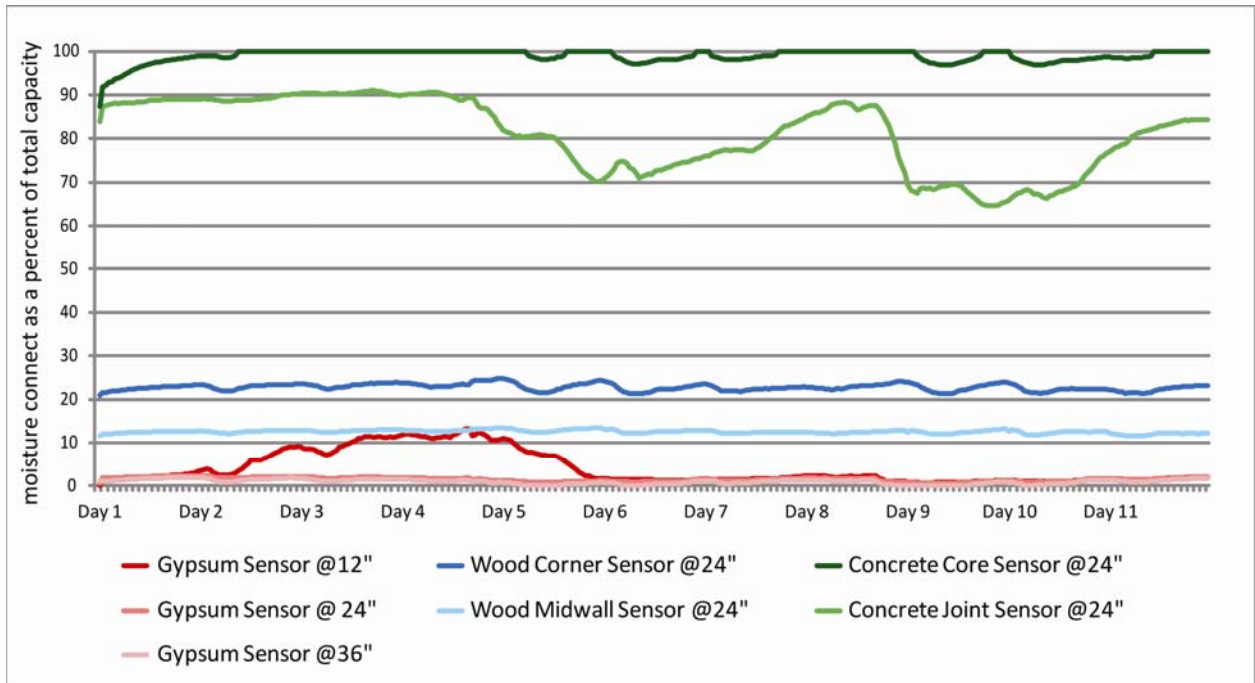


Fig. A.1. GRAPH: Drying period for test pod A: sealed block after flood simulation 1.

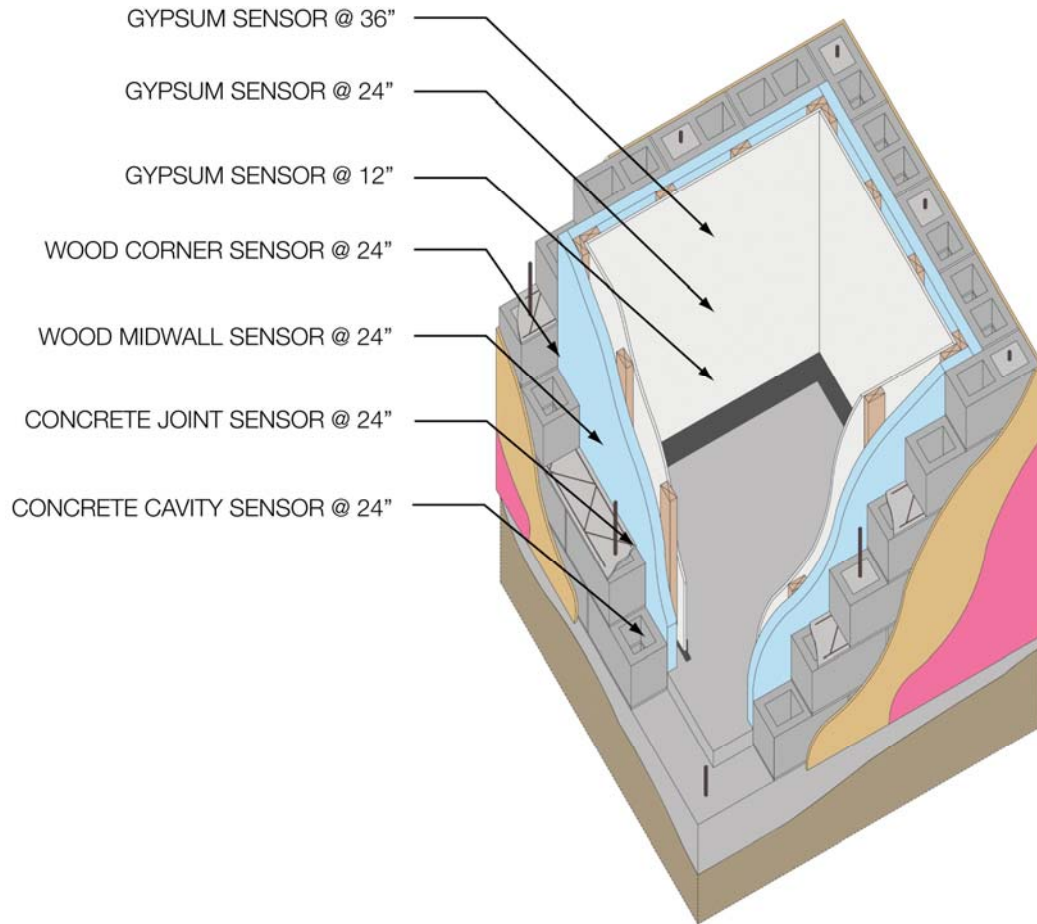


Fig. A.2. DIAGRAM: Sensor locations for test pod A: sealed block after flood simulation 1.

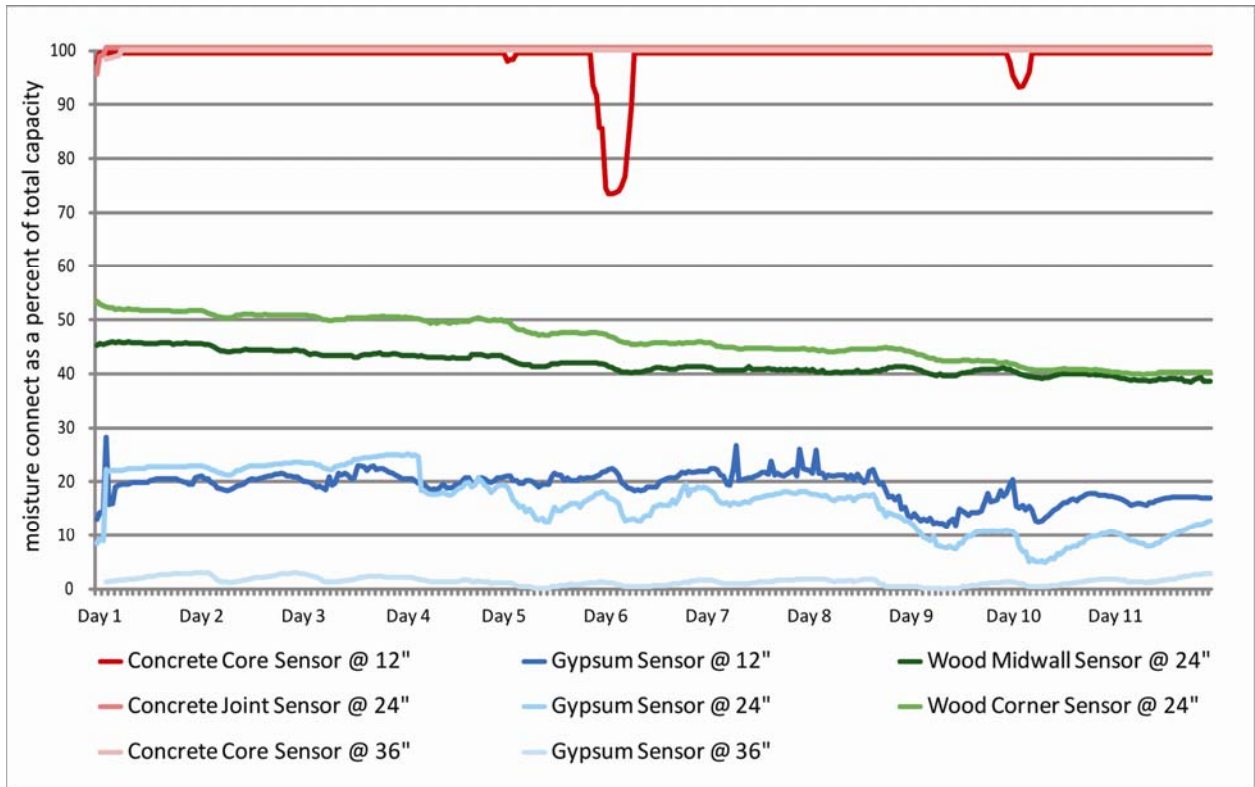


Fig. A.3. GRAPH: Drying period for test pod B: cavity wall after flood simulation 1.

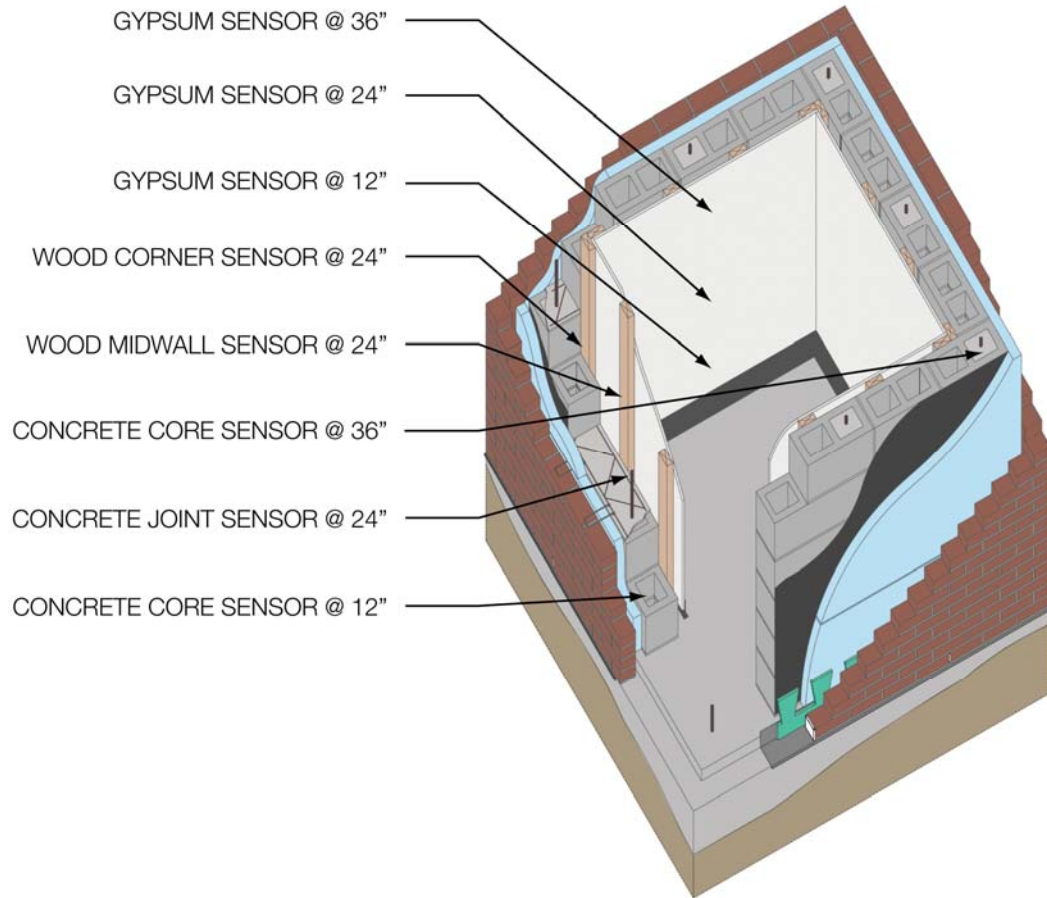


Fig. A.4. DIAGRAM: Sensor locations for test pod B: cavity wall after flood simulation 1.

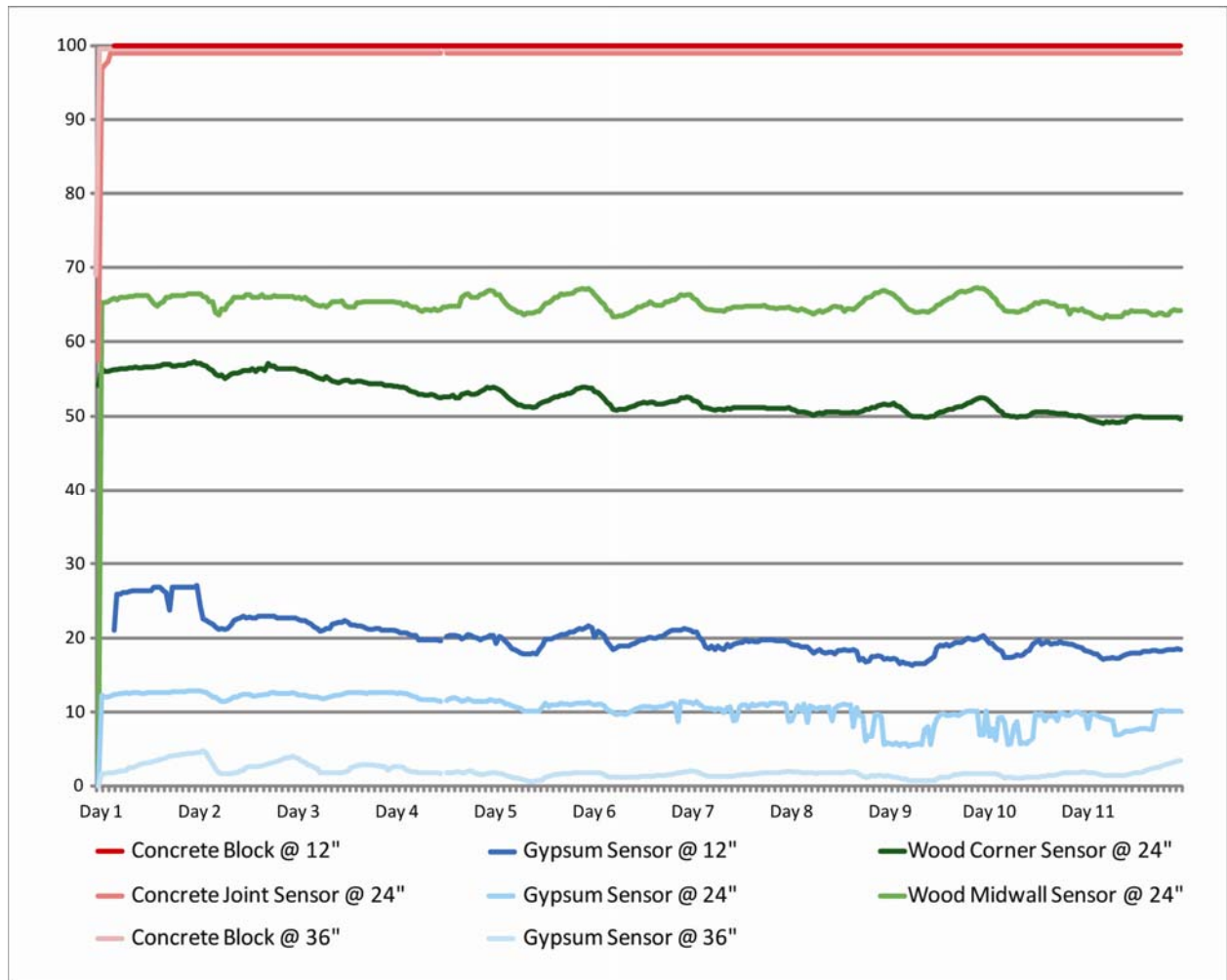


Fig. A.5. GRAPH: Drying period for test pod C: unsealed block after flood simulation 1.

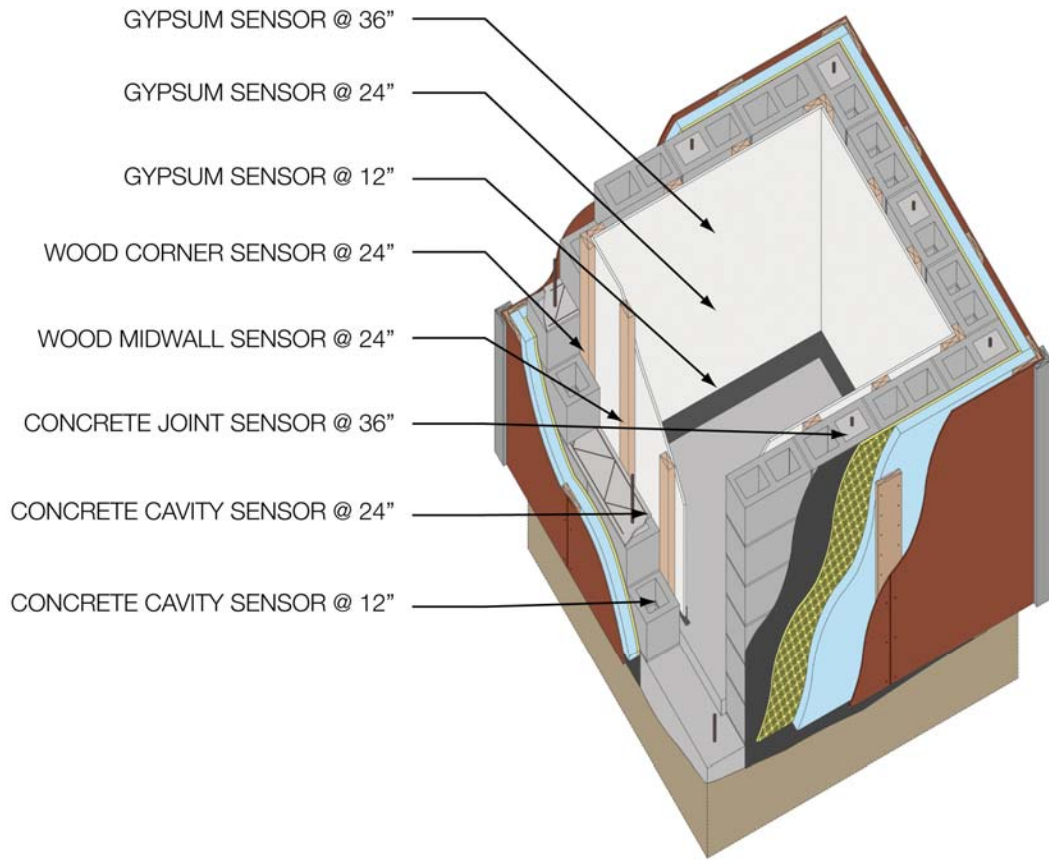


Fig. A.6. DIAGRAM: Sensor locations for test pod C: unsealed block after flood simulation 1.

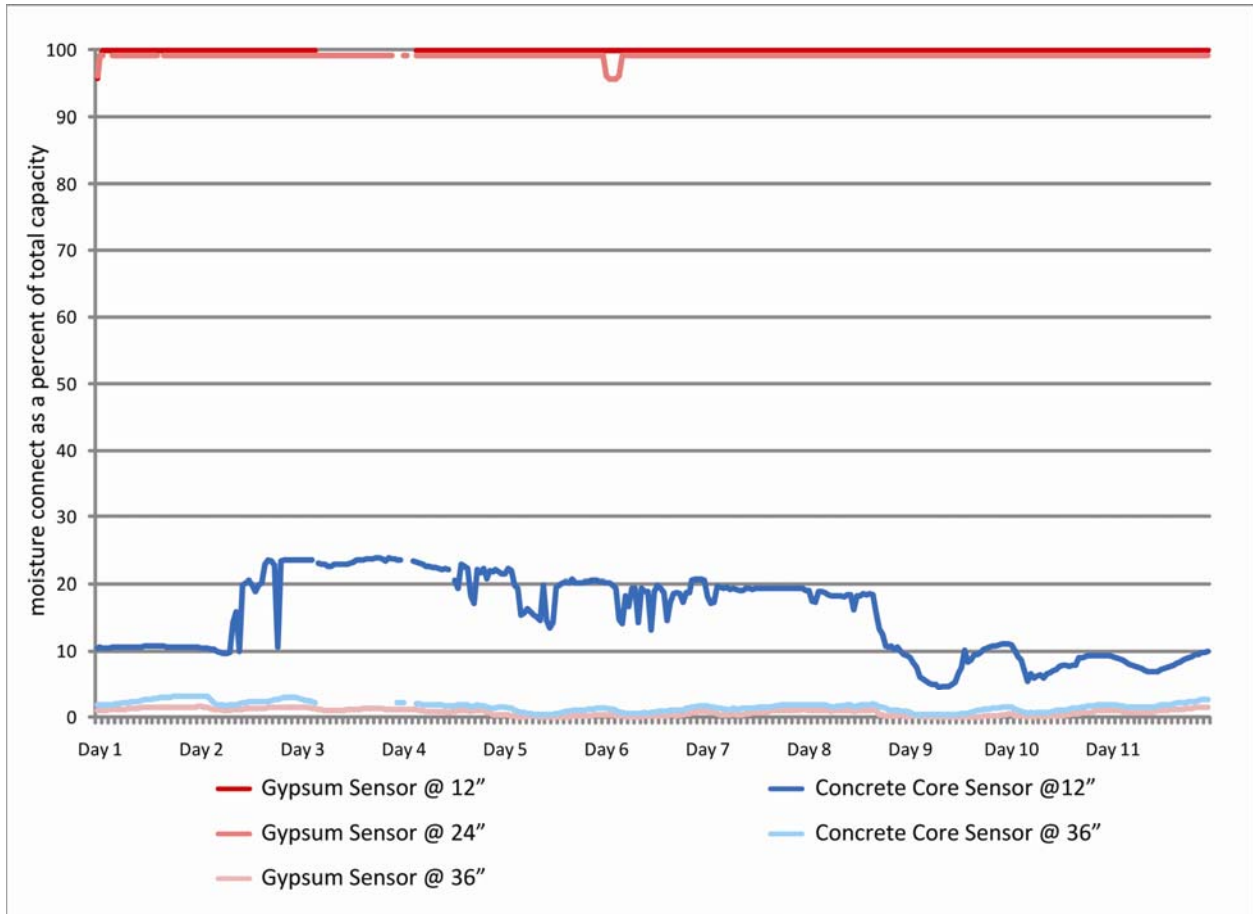


Fig. A.7. GRAPH: Drying period for test pod D: ICF after flood simulation 1.

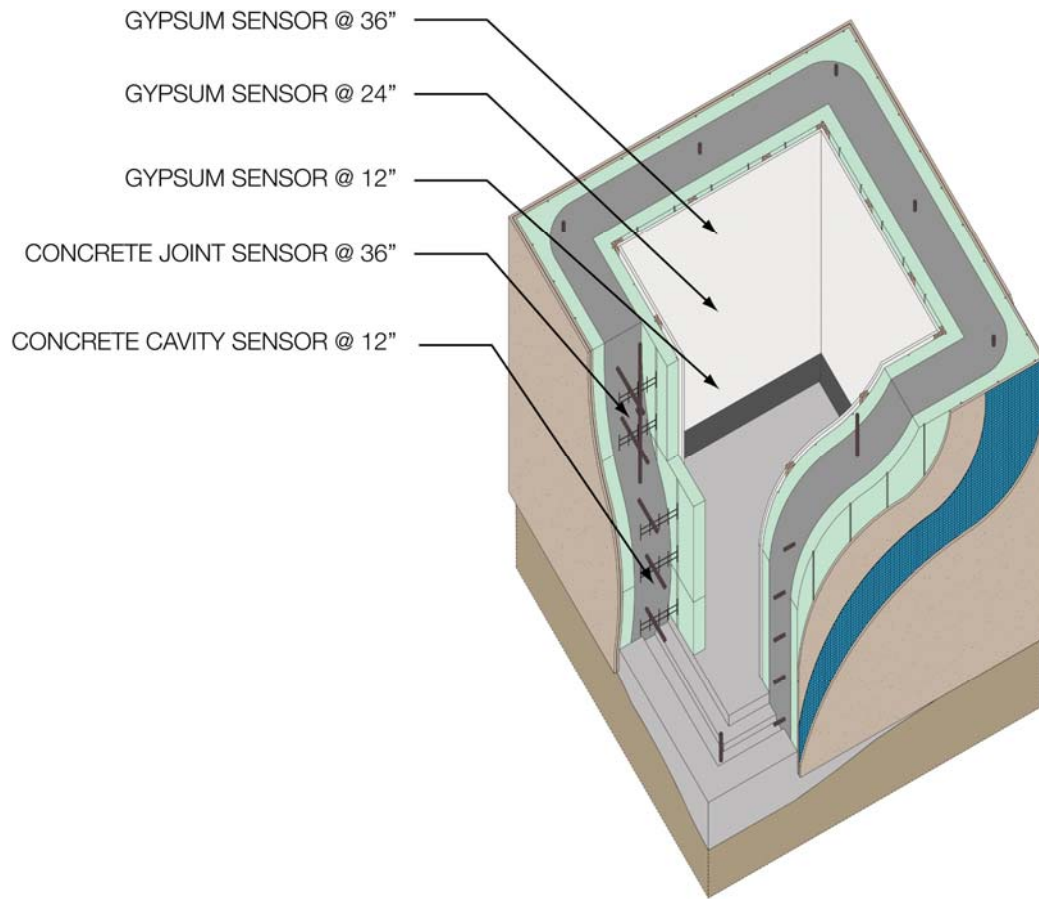


Fig. A.8. DIAGRAM: Sensor locations for test pod D: ICF after flood simulation 1.

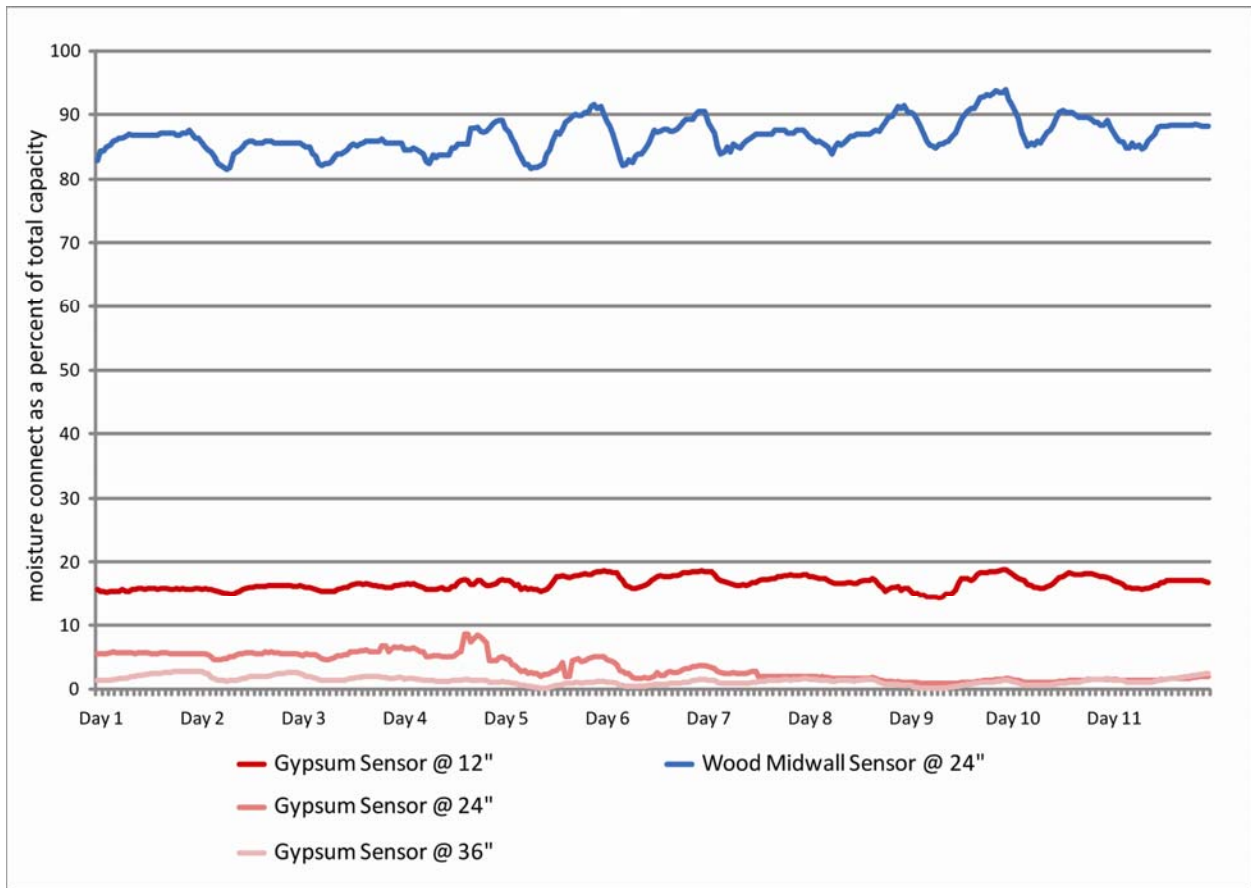


Fig. A.9. GRAPH: Drying period for test pod E: metal stud after flood simulation 1.

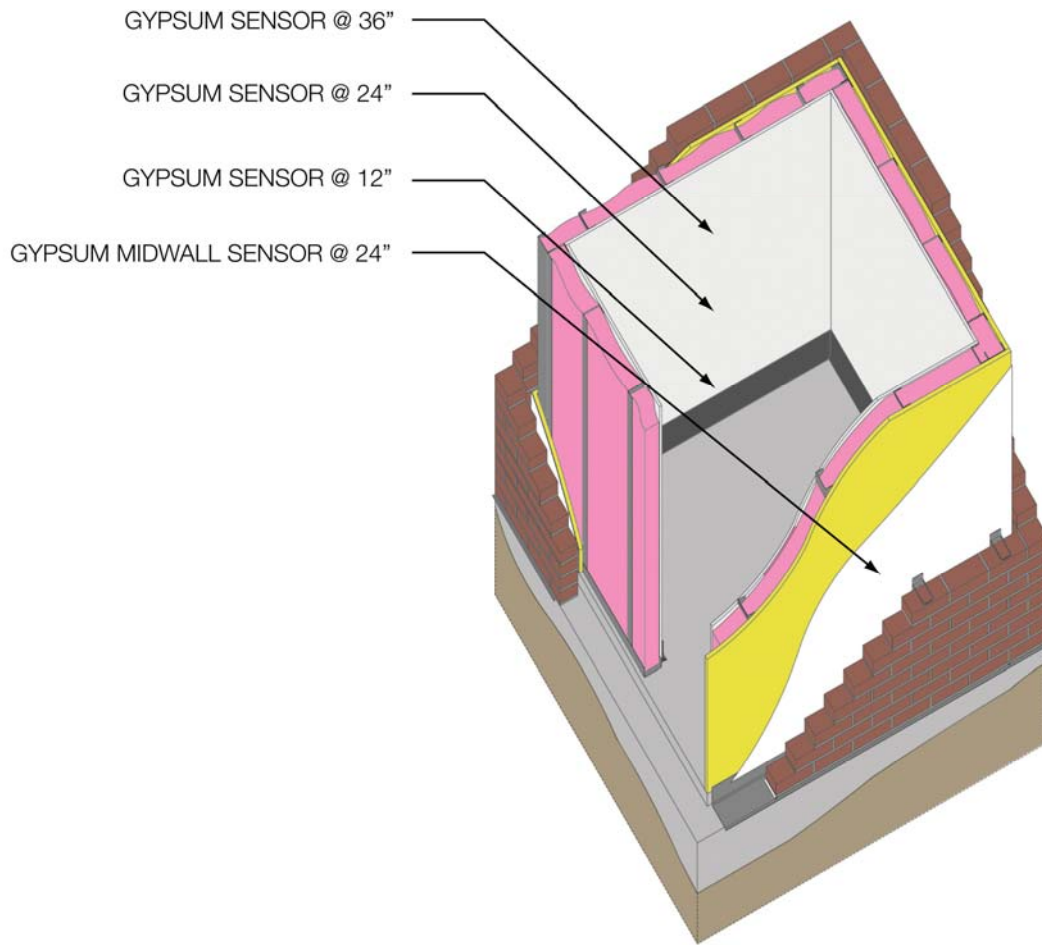


Fig. A.10. DIAGRAM: Sensor locations for test pod E: metal stud after flood simulation 1.

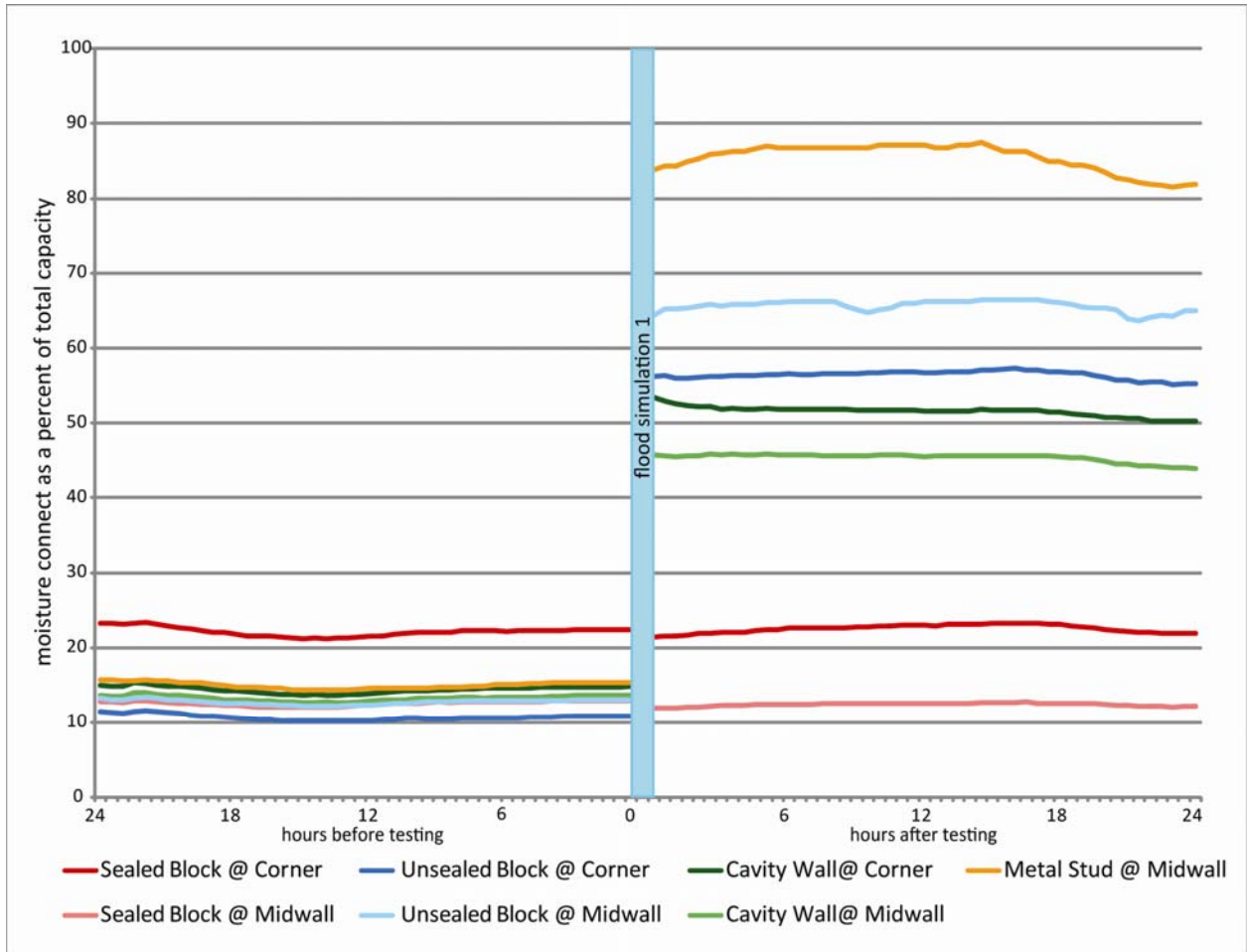


Fig. A.11. GRAPH: Wood sensor readings 24 hours before and after flood simulation 1.

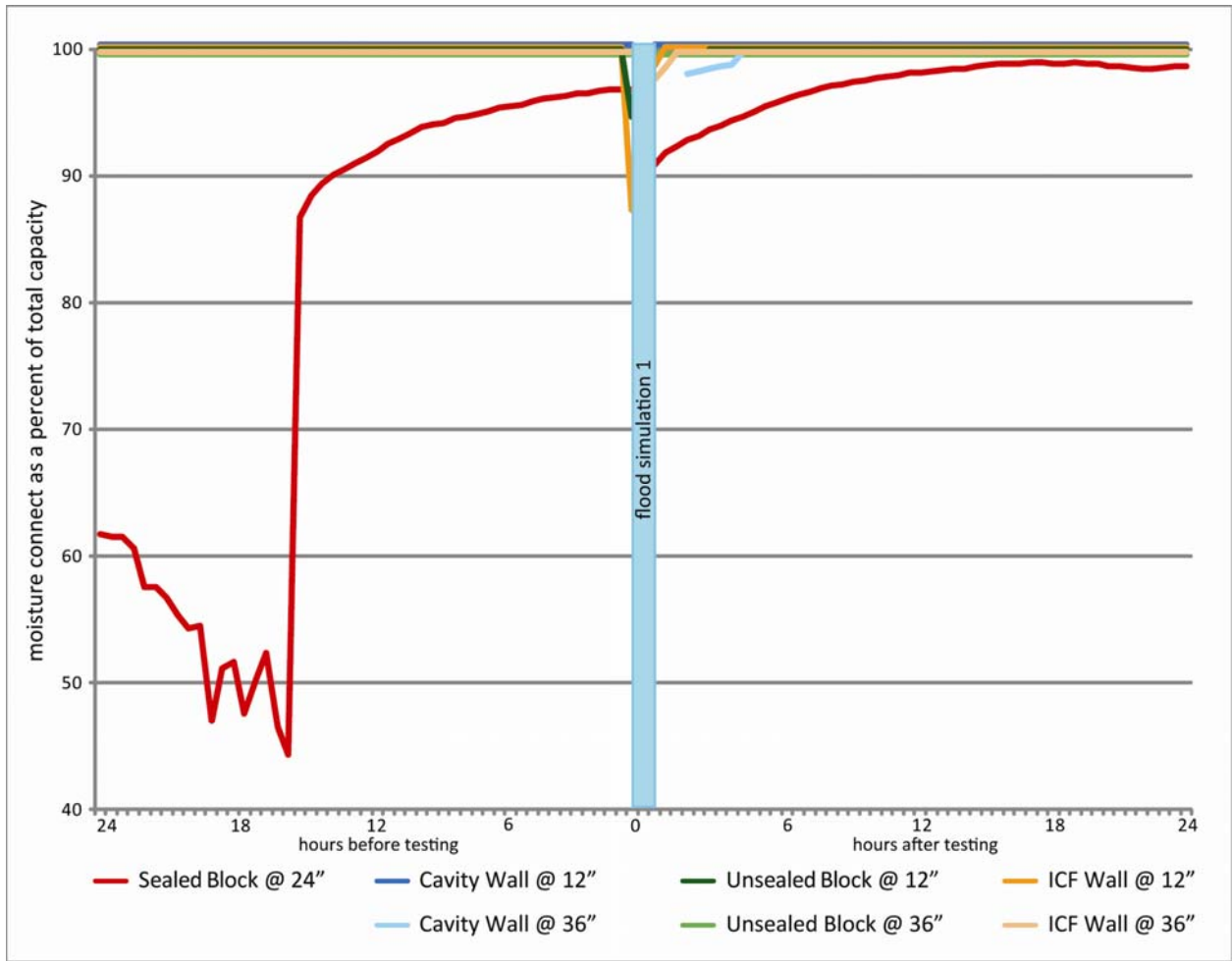


Fig. A.12. GRAPH: Concrete core sensor readings 24 hours before and after flood simulation 1.

A.3 Observations From Flood Simulation 2

Date	Time	Flooding Simulated Depth (in)	Test Pod G Interior Water Depth (in)	Test Pod H Interior Water Depth (in)	Test Pod A Interior Water Depth (in)	Test Pod B2 Interior Water Depth (in)	Test Pod D2 Interior Water Depth (in)	Test Pod F2 Interior Water Depth (in)
28-Jun	7:45 AM	0	0	0	0	0	0	0
	8:36 AM	10	<i>seepage south wall</i>	0	0	0	<i>seepage two corners</i>	<i>seepage two corners</i>
	8:50 AM	14	<i>more seepage, capillary action</i>	<i>seepage started</i>	0	0	<i>more seepage</i>	<i>more seepage</i>
	9:45 AM	24	0	<i>seepage</i>	0	<i>seepage, early cells are seeping more</i>	<i>seepage</i>	0.13
	10:45 AM	36	0.25	1.5	0	0.5	0.5	0.25
	11:45 AM	36	0.5	3.75	<i>corner seepage</i>	1.5	0.5	0.25
	12:45 PM	36	0.75	6	0	2.25	0.5	0.25
	1:45 PM	36	1	6.5	0	3	1	0.25
	2:45 PM	36	1	8	0	4	1.25	0.25
	3:45 PM	36	1.25	9	0	5	1.25	0.25
	5:45 PM	36	1.5	10	0	7	3	0.5
	7:45 PM	36	1.5	12	0.25	8	3	0.5
	9:45 PM	36	2.5	12.5	0.25	9	2.5	0.5
	11:45 PM	36	2.5	14	0.25	10	2.5	0.5
29-Jun	1:45 AM	36	3	13.5	0.25	10	3	0.5
	3:45 AM	36	3	15	0.25	13.5	3	0.5
	5:45 AM	36	3	15.5	0.25	13.5	3	0.5
	7:45 AM	36	3.5	15.5	0.25	13.5	3	0.5
	9:45 AM	36	3.5	16	0.25	14	3.5	0.5
	10:45 AM	36	3.75	16.5	0.25	14.5	3.75	0.5
	11:45 AM	31	3.75	16.75	0.25	14.5	3.75	0.5
	1:45 PM	12	3.75	17	0.25	15.5	3.75	0.5
	5:00 PM	0	3.75	17	0.25	15.5	3.75	0.5

Table 7. Observations from flood simulation 2.