

RCNY 5000 - TABLE 1 - RESIDENTIAL BUILDINGS						
MECHANICAL AND SERVICE WATER HEATING INSPECTIONS						
YES	NO	II	INSPECTION/TEST	FREQUENCY/MINIMUM	REFERENCE STANDARD (SEE ECC CHAPTER 6) OR OTHER CRITERIA	ECC OR OTHER CITATION
X		IB3	SERVICE WATER HEATING EQUIPMENT: HEATING AND COOLING EQUIPMENT MUST BE VERIFIED BY VISUAL INSPECTION FOR PROPER SIZING. POOL HEATERS AND COVERS SHALL BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL PLUMBING AND CONSTRUCTION INSPECTION	ACCA MANUAL J AND S, APPROVED CONSTRUCTION DOCUMENTS	R403.7, R403.8, R403.10, R403.11, R403.12, C403, C404
X		IB4	SERVICE WATER HEATING SYSTEM CONTROLS: SYSTEM CONTROLS MUST BE INSPECTED TO VERIFY THAT EACH DWELLING PROVIDED WITH AT LEAST ONE INDIVIDUAL PROGRAMMABLE THERMOSTAT WITH CAPABILITIES AS DESCRIBED IN ECC R403.1.1, AND THAT SUCH CONTROLS	PRIOR TO FINAL PLUMBING AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS, INCLUDING CONTROL	R403.1, R403.2, R403.5, C403, C404
X		IB5	SERVICE WATER PIPING DESIGN AND INSULATION: INSTALLED PIPING INSULATION MUST BE VISUALLY INSPECTED TO VERIFY CORRECT INSULATION PLACEMENT AND VALUES. SERVICE HOT WATER DISTRIBUTION SYSTEMS MUST BE INSPECTED TO VERIFY THE SUPPLY OF HEATED WATER.	PRIOR TO CLOSING CEILING AND WALLS AND PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS; NYC MECHANICAL CODE	R403.4, R403.5, R403.8, C403, C404; MC 1204
	ID		OTHER			
X		ID1	MAINTENANCE INFORMATION: MAINTENANCE MANUALS FOR MECHANICAL, SERVICE HOT WATER AND ELECTRICAL EQUIPMENT AND SYSTEMS REQUIRING PREVENTIVE MAINTENANCE MUST BE REVIEWED FOR APPLICABILITY TO INSTALLED EQUIPMENT AND SYSTEMS BEFORE SUCH MANUALS ARE PROVIDED TO THE OWNER. LABELS REQUIRED FOR SUCH EQUIPMENT OR SYSTEMS MUST BE INSPECTED FOR ACCURACY AND COMPLETENESS.	PRIOR TO SIGN-OFF OR ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY	APPROVED CONSTRUCTION DOCUMENTS	R303.3

2020 NYCECC Tabular Analysis					
Residential Building					
Energy Code Scope of Work					
NYCECC Citation	Provision	Item Description	Code Prescriptive Value (ECC)	Proposed Design Value	Supporting Documentation
R403.4	Mechanical system piping insulation (Mandatory)	Water Heater piping insulation	R403.4: All piping serving as part of a heating or cooling system shall be thermally insulated in accordance with table R403.4; the thickness and conductivity of the insulation must result in an R-value of no less than R-3. Hot water piping insulation: 105-140F, <1" & 1"-1.5" diameter = 1.0 inches	Hot water piping insulation: 1 inches	Refer #6 piping insulation under 1.06(b) domestic water piping on sheet P-001.
R403.5.1	Heated water circulation and temperature maintenance systems (Mandatory)	Heated water circulation and temperature maintenance systems (Mandatory)	Heated water circulation systems shall be provided with a circulation pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.	Provided circulation pump that turns off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.	Refer re-circulation pump schedule on sheet P-205.
R403.5.1.1	Circulation systems	Domestic hot water circulation pump	Domestic hot water circulation pump Heated water circulation systems shall be provided with a circulation pump. The system return pipe must be a dedicated return pipe or a cold water supply pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.	The controls automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.	Refer #8 under 1.06(B) domestic water piping on sheet P-001.
R403.5.2	Demand recirculation systems	Domestic hot water circulation pump	A water distribution system having one or more recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe shall be a demand recirculation water system. Pumps shall have controls where the control shall start the pump upon receiving a signal from the action of a user of a fixture or appliance, sensing the presence of a user of a fixture or sensing the flow of hot or tempered water to a fixture fitting or appliance and the control shall limit the temperature of the water entering the cold water piping to 104°F (40°C).	Controls provided per requirements	Refer #7 under 1.06(B) domestic water piping on sheet P-001.
R403.5.3	Hot water pipe insulation (Prescriptive)	Domestic hot water pipe insulation	Insulation for hot water piping with a thermal resistance, R-value, of not less than R-3 shall be applied to the following: 1. Piping $\frac{3}{8}$ inch (19.1 mm) and larger in nominal diameter. 2. Piping serving more than one dwelling unit. 3. Piping located outside the conditioned space. 4. Piping from the water heater to a distribution manifold. 5. Piping located under a floor slab. 6. Buried piping. 7. Supply and return piping in recirculation systems other than demand recirculation systems.	Hot water piping insulation provided as required	Refer #6 under 1.06(B) domestic water piping on sheet P-001.
R403.5.5	Supply of heated water	Method of supply of domestic hot water supply	One of the following items is required: 1. Max. allowable pipe length - list nominal pipe size, maximum pipe length per table R403.5.5. 2. Max. allowable pipe volume method - list nominal pipe size, maximum volume per foot length, total maximum volume based on proposed design length. 3. Drain water heat recovery method - drain water heat recovery system capture at least one shower per dwelling and minimum efficiency of 40% for equal flow and 52% for unequal flow, and compliance with C403.5.4. 4. Recirculation system- recirculation loop with no more than 0.5-gallons of storage. Loop must have an occupant-controlled switch or occupancy sensor.	Provided recirculation system with recirculation loop. Loop has an occupant-controlled switch.	Refer #7 under 1.06(B) domestic water piping on sheet P-001.

GAS STORAGE HOT WATER HEATER SCHEDULE									
ITEM	QUANTITY	LOCATION	MAX. INPUT (MBH)	STORAGE CAPACITY	RECOVERY CAPACITY (GPH) @ 90° F	TYPE	UEF	MANUFACTURER & MODEL NO.	REMARKS
WH-1	1	AS PER PLAN	100	75 GAL.	129	GAS STORAGE TYPE WATER HEATER	0.96	A.O SMITH HDHE 75	-EXPANSION TANK (ET-1), THERMOSTATIC MIXING VALVE (TMV-1) & HOT WATER RECIRCULATION PUMP (RCP-1) -PROVIDE DRIP PAN

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