Permit #: Address:

Compliance Path Used: ☐ Prescriptive ☐ Trade Off ☐ Performance

Project Type: ☐ New Non-Residential Project ☐ Non-Residential Addition ☐ Renovation

Key: Mandatory for all Compliance Approaches as Relevant to the Scope of Work
Mandatory for Prescriptive Path

90.1–2010 Section #	Pre–Inspection Section Description	Prescriptive Code Value	Plan Value	Designer Identified Dwg Page	Plan Review	Field Insp.
4.2.2, 5.4.3.1.1 SR	Plans, specifications, and calculations give info for air–barrier energy compliance.	N/A				
Table 5.5–4 SR	Provide Sum of All Exterior Wall Area in Square Feet	N/A				
Table 5.5–4 SR	Provide Sum of All Exterior Window Area in Square Feet	N/A				
Table 5.5–4 SR	Calculate Window to Wall Area (WWA) based on values above.	N/A				
Table 5.5–4 SR	If WWA≥ 40%, then prescriptive path cannot be used.	N/A				
4.2.2, 6.7.2 MR	Plans, specifications, and calculations give info for mechanical energy compliance.	N/A				
4.2.2, 6.7.2.4 MR	Systems balanced. HVAC Commissioning docs. provided for bldgs ≥ 50,000 sqft.	N/A				
4.2.2, 7.7.1 MR	Service Hot Water docs/ calcs and exemption info. given. Boosters have PSI sensors, PSI reducers, & flow controls	N/A				
4.2.2, 8.4.1.2 E	Plans, specs., and calcs. & exemption info given for all relevant electric systems. Branch circuits sized for max drop of 3%. Feeders sized for max. 2% voltage drop at design load.	N/A				
4.2.2, 9.4.4 ER	Plans, docs, specs./ calcs and exemption info. given for interior lighting systems and equipment.	N/A				
4.2.2, 9.7 E	Plans, docs, specs./ calcs and exemption info. given for exterior lighting systems and equipment.	N/A				

90.1–2010 Section #	Foundation Inspections	Prescriptive Code Value	Plan Value	Identified Dwg Page	Plan Review	Field Insp.
5.5.3.3 SR	Below Grade Insulation Wall Value.	None Required				
5.8.1.2 INSP	Below Grade Insulation Wall Installed per manufacturer's instructions	N/A	N/A		N/A	
5.5.3.5 SR	Slab edge insulation value	Heated: R–15,24" Unheated: None Req.				
5.8.1.2 INSP	Slab edge Insulation Installed per manufacturer instructions	N/A	N/A		N/A	
5.8.1.7 SR	Ext. Insulation protected against damage, sunlight, moisture, wind, landscaping maintenance activities.	N/A				
5.8.1.7.3 SR	Insulation in contact with the ground has ≤0.3% water absorption rate per ASTM c272	0.3% Water Absorption Rate				
6.3.2, 6.4.4.1, 6.4.4.2 MR	Piping, ducts and plenum are insulated and sealed when installed in or under a slab	N/A				
6.4.3.8 E	Freeze protection & snow/ice melting sys. sensors for future connection to controls.	N/A	N/A			
6.4.4.1.5 M	Bottom surface of floor structures using radiant heating insulated to R–3.5	N/A	N/A			

90.1–2010 Section #	Framing/ Rough–In Inspection	Prescriptive Code Value	Plan Value/ Strategy	Identified Dwg Page	Plan Review	Field Insp.
5.4.3.1.2 SR	Continuous air–barrier is wrapped, sealed, caulked, gasketed, taped in approved manner.	N/A	N/A			
5.4.3.2 S	Factory–built fenestration & doors are labeled as meeting air–leakage requirements.	N/A	N/A			
5.4.3.4 S	Vestibules are installed where building entrances separate conditioned space from the exterior & meet exterior envelope requirements. Doors have self closing devices & are 7 feet apart.	N/A	N/A			
5.5.4.3a SR	Vertical Fenestration U–factor Non–metal framing all: U–0.40 Mtl frame, curtain/store: U–0.50 Mtl frame, entrance door: U–0.85 Mtl frame, all other U–0.55					
5.5.4.3a SR	Skylight Fenestration U–factor Skylight w/curb, Glass, %roof: 0–5%, 1.17 Skylight w/curb, Plastic, %roof 0–5%, 1.30 Skylight w/OUT curb, All,%roof: 0–5%, 0.69					
5.5.4.4.1 S	Vertical Fenestration SHGC value.	SHGC–0.4				
5.5.4.4.2 SR	Skylight Fenestration SHGC Skylight w/curb, Glass: %Roof SHGC 0–2% 0.49 2–5% 0.39 Skylight w/curb, Plastic: 0–2% 0.65 2–5% 0.34 Skylight w/OUT curb, All: 0–2% 0.49 2–5% 0.39					
5.8.2.1 S	Fenetration products rated in accordance with NFRC.	N/A				
5.8.2.2 SR	Fenetration products are certified as to the performance labels or certificates.	N/A				
5.8.2.3, 5.8.3.6 S	U–factor of opaque doors associated with the building thermal envelope meets requirements.	Swinging: U–0.70 Non–Swing: U–1.50				

90.1–2010 Section #	Plumbing Rough–In Inspection	Prescriptive Code Value	Plan Value/ Strategy	Designer Identified Dwg Page	Plan Review	Field Insp.
7.4.3 M	Service hot water pipes insulated. Under slab piping verified during Foundation Inspection.	N/A				
7.4.4.1 M	Temp. controls installed on service water heating systems (≤120 F to max. temp. range)	N/A				
7.4.4.2 MR	Automatic time switches installed to switch off the recirculating hot water system or heat trace.	N/A				
7.4.6 M	Heat traps installed on non–circulating storage water tanks.	N/A				

90.1–2010 Section #	Mechanical Rough–In Inspection	Prescriptive Code Value	Plan Value/ Strategy	# Systems	Designer Identified Dwg Page	Plan Review	Field Insp.
6.4.1.4, 6.4.1.5 M	HVAC equipment regulated by Federal National Appliance Energy Conservation Act meets requirements. Unregulated equipment labeled as meeting 90.1.	See Code Tables					
6.4.1.5.2 M	PTAC and PTHP with sleeves 16" by 42" labeled for replacement only.	N/A					
6.4.3.4.1 M	Stair and elevator shaft vents have motorized dampers that automatically close.	N/A					
6.4.3.4.2, 6.4.3.4.3 M	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use & meet the maximum leakage rates. Check gravity dampers where allowed.	N/A					
6.4.3.4.4 M	Ventilation fans >0.75 hp have automatic controls to shut off fan when not required	N/A					
6.4.3.4.5 M	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	N/A					
6.4.3.9 MR	Demand control ventilation provided for spaces >500 ft2 & >40 ppl/1000 ft2 occupant density & served by systems with air side economizer, auto modulating outside air damper control or design air flow > 3,000 CFM	N/A					
6.4.3.10 M	Single zone HVAC systems with fan motors ≥5HP have variable airflow controls. Air conditioning equip. w/ cooling capacity ≥110,000 Btu/h has variable airflow controls.	N/A					
6.4.4.1.1 M	Insulation exposed to weather is protected from damage. Insulation outside of the conditioned space & assoc. with cooling systems is vapor retardant.	N/A					
6.4.4.1.2 M	HVAC ducts and plenums insulated per space requirements. Table 6.8.2A/B						
6.4.4.1.3 M	HVAC piping insulation thickness. Table 6.8.3A/B						
6.4.4.1.4 M	Thermally ineffective panel surfaces of sensible heating panels have insulation ≥3.5	R–3.5					
6.4.4.2.1 M	Ducts and Plenums sealed based on static pressure and location.	N/A					
6.4.4.2.2 M	Ductwork operating > 3 in. w.g. requires air leakage testing.	N/A					
6.5.1 MR	Air economizers provided where required, meet the requiremtns for design capacity, control signal, and high–limit shuf–off and integrated economizer control.	N/A					
6.5.5.1.1.4 M	Return air and outdoor air dampers meet minimum air leakage requirements.	N/A					
6.5.5.1.1.5 MR	Means provided to relieve excess outside air during economizer operation.	N/A					
6.5.1.2 MR	Water economizers provided where required, meet the requirements for design capacity, maximum pressure drop and integrated economizer control and heating system impact.	N/A					
6.5.1.4 MR	Economizer operation will not increase heating energy use during normal operation.	N/A					
6.5.2.1 MR	Zone controls can limit simultaneous heating & cooling and sequence heating & cooling to each zone.	N/A					
6.5.2.2.3 M	Hydronic heat pump systems connected to a common water loop meet heat rejection and heat addition requirements.	N/A					
6.5.2.3 M	Dehumidification controls provided to prevent reheating, recooling, mixing of hot and cold airstreams or concurrent heating & cooling of the same airstream.	N/A					
6.5.2.4 M	Water economizer specified on hydronic cooling & humidification systems designed to maintain inside humidity at ≥35 F dewpoint if an economizer is required.	N/A					

90.1–2010 Section #	Mechanical Rough–In Inspection	Prescriptive Code Value	Plan Value/ Strategy	# Systems	Designer Identified Dwg Page	Plan Review	Field Insp.
6.5.3.1.2 M	HVAC fan motors not larger than the first available motor size greater than the bhp.	N/A					
6.5.3.1.2 M	VAV fan motors >= 10 HP to be driven by variable speed drive, have a vane–axial fan with variable pitch blades, or have controls to limit fan motor demand.	N/A					
6.5.3.1.2 M	VAV fans have static pressure sensors positioned so setpoint <= 1/3 total design pressure.	N/A					
6.5.3.2.3 M	Reset static pressure setpoint for DDC controlled VAV boxes reporting to central controller based on the zones requiring the most pressure.	N/A					
6.5.3.3 M	Multiple zone VAV systems with DDC of individual zone boxes have static pressure setpoint rest controls.	N/A					
6.5.3.4 M	Multiple zone HVAC systems have supply air temperature reset controls.	N/A					
6.5.4.1 M	HVAC pumping systems > 10 HP designed for variable fluid flow.	N/A					
6.5.4.2 M	Reduce flow in pumping systems > 10 HP to multiple chillers or boilers when others are shut down.	N/A					
6.5.4.3 M	Temperature reset by representative building loads in pumping systems > 10 HP for chiller and boiler systems > 300,000 Btu/h.	N/A					
6.5.4.4.1 M	Two–position automaitc valve interlocked to shut off water flow when hydronic heat pump with pumping system > 10 is off.	N/A					
6.5.4.4.2 M	Hydronic heat pumps and water cooled unitary air conditioners with pump systems > 5 HP have controls or devices to reduce pump motor demand.	N/A					
6.5.5.2 M	Fan systems with motors >=7.5 HP associated with heat rejection equipment can operate at ⅔ of full speed and have fan speed controls.	N/A					
6.5.5.3 M	Centrifugal fan open–circuit cooling towers with a combined capacity >1,100 FPM meet the cooling tower requirements in Table 6.8.1G.						
6.5.6.1 MR	Exhaust air energy recovery on systems >=5,000 CFM and 70% of design supply air.	N/A					
6.5.6.2 M	Condenser heat recovery system that can heat water to 85 F or provide 60% of peak heat rejection is installed for service hot water in ⅔ facility, water cooled systems reject >6 MMBtu, and SHW >=1 MMBtu.	N/A					
6.5.7.1.1 M	Replacement air introduced directly into the hood cavity of the kitchen exhaust shall not exceed 10% of the hood exhaust airflow rate.	N/A					
6.5.7.1.2 M	Conditioned supply air to space with a kitchen hood shall not exceed the greater of a) supply flow required to meet space heating or cooling, or b) hood exhaust flow minus the available air transfer from available spaces.	N/A					
6.5.7.1.3 M	Kitchen hoods with a total exhaust airflow rate >5,000 CFM meet exhaust rate requirements.	N/A					
6.5.7.1.4 M	Kitchen hoods with a total exhaust airflow rate >5,000 CFM meet replacement air, ventilation system, or energy recovery requirements.	N/A					
6.5.7.1.5 M	Approved field test used to evaluate design air flow rates and demonstrate proper capture and containment of kitchen exhaust systems.	N/A					
6.5.7.2 MR	Fume hood exhaust systems >=5,000 CFM have VAV hood exhaust and supply systems, direct make–up air or heat recovery.	N/A					
6.5.8.1 M	Unenclosed spaces that are heated use only radiant heat.	N/A					
6.5.9 MR	Hot gas bypass systems limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	N/A					
7.4.2 M	Service water heating equipment meets efficiency requirements.	N/A					
7.5.1 M	Combined space and water heating system not allowed unless standby loss less than calculated maximum. AHJ has approved or combined connected load < 150 kBtu/h.	N/A					
7.5.2 M	Service water heating equipment used for space heating complies with the service water heating equipment requirements.	N/A					

90.1–2010 Section #	Electrical Rough–In Inspection	Prescriptive Code Value	Plan Value/ Strategy	Designer Identified Dwg Page	Plan Review	Field Insp.
8.4.2 E	At least 50% of all 125 volt 15– and 20– amp receptacles are controlled by an automatic device.	N/A				
9.4.1.1 ER	Automatic lighting control to shut off all project lighting by a time of day schedule, an occupant sensor, or from another control alarm system.	N/A				
9.4.1.2 ER	Independent lighting control readily accessible and visible to occupants.	N/A				
9.4.1.2 ER	Independent lighting control has at least three steps: OFF, ON, and one step between 30 – 70% lighting power.	N/A				
9.4.1.2b ER	An occupancy sensor or timer automatically turns off lights 30 min. after occupants leave. Applicable to: 1) classrooms/ lecture halls 2) conference/ meeting room 3) lunch or break room 4) storage rooms 50–1,000ft 5) office spaces up to 250ft2 6) copy/ printing rooms 7) restrooms 8) dressing/ locker fitting rm.	N/A				
9.4.1.2c ER	For spaces not included in 9.4.2.1b, control device shall be activated "on" manually or by an occupant sensor. Override of any scheduled shut off control is allowed for maximum of 2 hours.	N/A				
9.4.1.3 E	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	N/A				
9.4.1.4 ER	Primary side–lighted area >=250 are equipped with lighting controls.	N/A				
9.4.1.5 ER	Enclosed spaces with daylight area under skylights and rooftop monitors >900 square feet are equipped with required lighting controls.	N/A				
9.4.1.7 E	Automatic lighting controls for exterior lighting included in project.	N/A				
9.4.2 ER	Exit signs do not exceed 5 watts per face.	5 Watts/Face				
9.4.3 ER	Exterior grounds lighting over 100W provides >60 m/W unless on motion sensor or fixture is exempt from scope of code or from external LPD	N/A				
9.6.2 ER	Additional interior lighting power allowed for special functions is automatically controlled and separated from general lighting.	N/A				
9.6.3 E	Where space LPD requirements are adjusted based on room cavity ratios, dimensions are consistent with plans.	N/A				
10.4.1 E	Electric motors meet requirements where applicable.	N/A				

90.1–2010 Section #	Insulation Inspection	Prescriptive Code Value	Plan Value/ Strategy	Designer Identified Dwg Page	Plan Review	Field Insp.
5.4.3.1 SR	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed or weather stripped to minimize air leakage.	N/A				
5.5.3.1 SR	Roof R–value. Above Deck: Metal: Attic:	R–20 c.i. R–13+R–13 R–38				
5.8.1.2 SR	Roof insulation installed per manufacturer's instructions. Blown or poured loose fill insulation installed only where the roof slope >= 3/12	N/A				
5.5.3.1 SR	Skylight curbs insulated to the level of roofs with insulation above deck or R–5.	N/A				
5.5.3.1.1 SR	High–albedo roofs meet solar reflectance requirements of 0.70 & thermal emittance of 0.75 or SRI of 82.	N/A				
5.5.3.2 SR	Above Grade wall insulation R–value. Mass: Metal Bldg: Steel–framed: Wood–framed:	R–9.5 c.i. R–19 R–13+R7.5c R–13				
5.8.1.2 INSP	Above Grade wall insulation installed per manufacturer's requirements.	N/A	N/A		N/A	
5.5.3.4 SR	Floor insulation R–value. Mass: Steel–joist: Wood–framed:	R–8.3 c.i. R–30 R–30				
5.8.1.2 INSP	Floor insulation installed per manufacturer's requirements.	N/A	N/A		N/A	
5.8.1.1 INSP	Bldg. envelope insul. is labeled w/ R–val or Insul. certificate.	N/A	N/A		N/A	
5.8.1.4 S	Eaves are baffled to deflect air to above the insulation.	N/A				
5.8.1.5 S	Insulation installed in substantial contact with the inside surface separating cond. from uncond. space	N/A				
5.8.1.6 S	Recessed equipment installed in bldg evelope assemblies does not compress the adjacent insulation.	N/A				
5.8.1.7 S	Exterior insulation is protected from damage with protective material.	N/A				
5.8.1.7.1 S	Attics and mechanical rooms have insulation protected where adjacent to attic or equipment access.	N/A				
5.8.1.7.2 S	Foundation vents do not interfere with insulation.	N/A				
5.8.1.8 S	Thermal roof insulation cannot be installed on top of a suspended ceiling.	N/A				

90.1–2010 Section #	Final Inspection	Prescriptive Code Value	Plan Value/ Strategy	Designer Identified Dwg Page	Plan Review	Field Insp.
5.4.3.3 SR	Weatherseals installed on all loading dock cargo doors in Climate Zones 4–8	N/A				
6.4.3.1.1 M	Heating and cooling to each zone is controlled by a thermostat	N/A				
6.4.3.1.2 M	Thermostatic controls have a 5 degree F deadband.	N/A				
6.4.3.2 M	Temperature controls have setpoint overlap restrictions.	N/A				
6.4.3.3.1 M	HVAC systems equipped with at one auto. shutdown control	N/A				
6.4.3.3.2 M	Setback controls allow auto. restart & temp. operation as required for maintenance.	N/A				
6.4.3.3.3 M	Systems with air capacity > 10,000 CFM include optimum start controls.	N/A				
6.4.3.3.4 M	Zone isolation devices and controls.	N/A				
6.4.3.5 M	Heat pump controls prevent supplemental elect. resistance heat from coming on when not needed.	N/A				
6.4.3.7 M	When humidification and dehumidification is provided to a zone, simultaneous operation is not possible.	N/A				
6.7.2.1 M	Furnished HVAC as–built drawings submitted within 90 days of system acceptance.	N/A				
6.7.2.2 M	Furnished O&M Manual for HVAC systems	N/A				
6.7.2.3 MR	An air and/ or hydronic system balancing report is provided for HVAC systems service zones >5,000 ft2 of conditioned area.	N/A				
6.7.2.4 MR	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls	N/A				
7.4.4.3 M	Provide lavatory faucet temperature <= 110 deg. F.	110 Deg F				
7.4.4.4 M	Controls are installed that limit the operation of a recirculation pump installed to maintain temp. of a storage tank.	N/A				
7.4.5.1 M	Pool heaters are equipped with on/off switch and no continuous burning pilot light.	N/A				
7.4.5.2 M	Pool covers are provided for heated pools and pools heated to >90 deg F. have a cover >=R–12.	R–12				
7.4.5.3 M	Time switches are installed on all pool heaters and pumps.	N/A				
8.7.1 E	Furnished as–built drawings for electric power systems within 30 days of system acceptance.	N/A				
8.7.2 E	Furnished O&M manuals for electrical power systems and equipment.	N/A				
9.2.2.3 ER	Installed lamps and fixtures are consistent with what is shown on the approved lighting plans, which demonstrate proposed watts are less than or equal to allowed watts.	N/A	N/A			
9.4.3 ER	Exterior lighting power demonstrated proposed watts are less than or equal to allowed watts.	N/A	N/A			
10.4.3 E	Elevators are designed with proper lighting, ventilation power, and standby mode.	N/A	N/A			

This Energy Verification Sheet is based on DOE's Store and Score spreadsheets and was adapted to fit the 2013 DC Energy Conservation Code. This verification sheet does not replace the 2013 DC ECC or ASHRAE 90.1-2010 and is included for DCRA to verify significant requirements during permitting and inspection. The project team shall design and install the building to the full energy code, irrespective of any one measure's existence on this sheet. The project team shall also include this document into their drawings and fill it in for applicable projects.

Directions: Each trade shall be responsible for filling out the sections of this page that are applicable to their discipline. Architects should fill out any code section starting with "S" or "SR", Mechanical trades should fill out any section starting with "M" or "MR," and Electrical should fill out any section starting with "E" or "ER." Every row must be completed to have compliant documentation. The design team is responsible for filling out the "Plan Value," "Identified Drawing Page," and "# Systems" columns. The "Identified Drawing Page" means that the page number associated with the project should be input that shows how compliance is being met. Should a measure be not applicable to the project scope, then the project team may place "N/A" (not applicable) or cross out the cells of the entire row. Exemptions to measures are not included in this verification sheet, so it is up to the design team to read the code for applicable exemptions and place "Exempt per Section (insert code section # here),"Projects using the Performance Path (energy modeling) need to fill in only the light gray, highlighted, mandatory rows. Other Compliance Approaches require filling in all rows. Completion of this page does not absolve project teams from providing other energy verification documentation. The "Plan Review" and "Field Insp." columns are for Plan Reviewers and Field Inspectors only with the exception of crossing out each cell in the row because the measure is not applicable to the scope of work. Plan Reviewers and Field inspectors should sign off on each item they inspected and confirm compliance. Photos of the completed sheets must be sent in to DCRA for storage and potential Certificate of Occupancy Review.

DCRA Energy Verification Sheet

ASHRAE 90.1-2010 Non-Residential Version 1.0_2014

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