A Closer Look Inspection Service
2009 IECC Commercial DFW area handout

101.4   Does the 2009 IECC apply?

101.4.2   Historic Exemption

101.4.3   Applicable Property   New Construction - Remodel - Finishout - Addition

101.4.4   A Change in Occupancy

101.4.5   A Change in space conditioning

502.1   Building Envelope Insulation Inspections

502.2.1   Wood Residential   Metal Res   Metal & non Res

Roof Deck Insulation   R - 20 continuous   R -19   R 13 + R 13 with blocks

Ceiling Insulation   R - 38   No drop ceiling insulation allowed

502.2.3

Above grade Wall Insulation R - 13   R -13+ R7.5 ci or R -19   R 13 + R 3.8 ci or R -19

502.2.6   Floor Insulation   Group Res R - 30   Other Groups   R - 19

502.2.7   Opaque doors   < 50% glass   U - .70

                   Roll up doors   U – 1.45

502.3   Fenestration Inspections

     Framing materials   U - .65

     Entrance door   U - .90

     Storefront Glass   U - .60   Impact resistant   U - .75

     Projection Factor = Horizontal awning distance / Vertical glass height

Results	<.25	$.25 \le .50$	$\ge .50$
SHGC	$\le .30$	$\le .40$	$\le .40$
Skylight 3% max	U - .76	SHGC .35	

502.4.3   Air Leakage Inspections

     Wall top plate penetrations sealed on all walls

     Seal Bottom plate to foundation / vertical Wall intersections on exterior walls

     Seal around Windows & Doors & all Building envelope penetrations

     Seal or gasket Doors / Windows / Fixtures / Junction boxes for outlets & switches

502.4.6.1   Conditioned loading dock weatherseals

502.4.7   Vestibule required for entry openings to > 3000 sqft area

503. 2   Mechanical Systems Inspections

HVAC Systems

503.2.1   Manual J provided according to ASHRAE/ACCA standard 183
503.2.3   Tables for HVAC system efficiency requirements
503.2.4.3   Programmable Setback thermostat
503.2.5   Ventilation Requirements per Chapter 4 of IMC
503.2.7   HVAC Ducts   R – 5 Unconditioned areas   R – 8 Exterior
503.2.7.1.1 Duct sealed with mastic
503.2.8   Refrigerant line insulation 1.5 inch

Water Heating Systems

504.2   Performance efficiency   Electric   .93 - .97 EF   Gas .67 - 80% E
504.4   360 degree Heat trap installed   or   1" insulation for 1st 8 feet
504.5   Pipe Insulation 1" or R -2   Circulating systems - All Hot & Return pipe
504.7   Pool requirements

Interior Lighting

505.5.2   Interior lighting density tables
505.2.1   Manual controls each room
505.2.2.1   50 % Light reduction controls
505.2.2.2   Automatic interior light shutoff controls for building > 5,000 sqft
                Scheduled time of Day (< 25,000 sqft) /Occupant Sensor / Other sensor
505.2.2.2.1   Occupant override required (2 hrs max) for areas < 5000 sqft
505.2.2.2.2 Automatic Holiday scheduling
505.2.2.3   Daylight zone exemption

Exterior Lighting

505.2.4   Exterior lighting controls photo sensor and time switch or
                astrological time switch required
505.6.1   Luminaries > 100 W required to have minimum efficacy of 60 lumens / W