

2014 ECCCNYS – RESIDENTIAL MODIFICATIONS

- **Following outline identifies increases in stringency between the 2010 ECCCNYS and 2012 IECC**
- These include items acted on by the ECCCNYS Technical Subcommittee where identified by #.

Chapter R4 : Residential less than 4 stories in height -increases in stringency by 2012 IECC.

Table R402.1.1- Prescriptive Insulation and Fenestration Requirements by Component

Fenestration-	Climate design zone 4- SHGC- 0.40 Climate design zone 5&6 U values =0.32 Sunrooms- Climate design zone –ALL - Fenestration-0.45 Skylights-0.70
Skylights-	Climate design zone –ALL U= 0.55
Wood framed wall-	Climate design zone 4 –R= 20 or 13+5ci Climate design zone 6 –R= 13+10ci /or 20+5ci
Ceiling-	Climate design zone 4&5- R= 49
Basement wall-	Climate design zone 5 – R=15/19
Mass wall-	Climate design zone 4 –R=8/13 Climate design zone 6 –R=15/20

For All Climate Design Zones

- R402.2.3 Eave Baffle added for air permeable insulation
- Table R402.2.6 light gauge steel –Table expanded /more comprehensive coverage for residential light gauge steel framing
- Table R402.4.1.1 – Air Barrier and Insulation installation -Table language has been clarified
- #. R402.4 Air Leakage- Building envelope visual inspection and ACH 50 testing are both mandated. Air Leakage rate in IECC 2012 “not exceeding 3 air changes per hour”- modified by Subcommittee to “less than 5 air changes per hour.
- # R402.4 Air Leakage- Further modification by Subcommittee for appropriate test protocol for Multiple Dwelling unit buildings(For other Residential groups ,R2, R3, R4),
- # R402.4 Air Leakage- Subcommittee added exemption from ACH 50 testing for building additions.
- #Subcommittee modified Vapor retarder requirements to prohibit Class 1 in Climate design zone #4

- #Subcommittee modified Vapor retarder requirements to prohibit Class 1 where insulated sheathing is used.
- R402.4.4 Recessed Lighting- labeling modification (air leakage listed on unit)
- R402.3 Ducts and air handlers required to be air sealed,
- Air handlers must be sealed must meet- ASHRAE 193.
- #.Building cavities may not be utilized as ducts or plenums. Modified by Subcommittee to allow use of building cavities for returns when inside of building envelope.
- # Subcommittee modifications to allow ducts in exterior walls when specific insulation protocols are followed.
- Duct testing required when outside of building envelope- tighter standard of 4 cfm/100 sf floor area.
- #R403.4 Service hot water plumbing – insulated to R-3 dependent on pipe size and run out line length
Subcommittee modified to exclude all pipe insulation with the exception of circulating domestic hot water and buried piping.
- # **R403.5. Whole–house Mechanical ventilation mandated** – (Code mandate by **IRC 2012** for ACH less than 5). Subcommittee included references to RCNYS allowing bath exhaust fans for whole house ventilation
- # Subcommittee included references to RCNYS for range hoods, exhaust rates and combustion dilution and ventilation air for appliances.
- Table R403.5.1 Mechanical Fan efficacy – mandated minimum
- R403.6 Equipment Sizing- ACCA Manual “S”, loads sized by Manual “J”
- R403.9 Pools - Permanently Installed Spas are added. R value removed (revert to ECCCNY-2010 for ARRA requirements)
- R404.1 Lighting- 75% minimum High efficacy lamps in fixtures.

