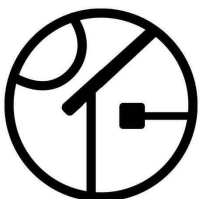


1 AIR SEALING AT ELECTRICAL BOXES IN CEILING  
SD0.4 NO SCALE

## GENERAL AIR SEALING REQUIREMENTS

1. THE AIR BARRIER SYSTEM IS AN ASSEMBLY COMPRISED OF DIFFERENT MATERIALS, CONNECTED TO ONE ANOTHER, DESIGNED AND CONSTRUCTED TO CONTROL AIRFLOW BETWEEN CONDITIONED AND UNCONDITIONED SPACES.
2. TO MAINTAIN CONTINUITY OF THE AIR BARRIER SYSTEM, THE SEPARATE COMPONENTS OF THE ASSEMBLY MUST BE CONTINUOUSLY CONNECTED TO ONE ANOTHER.
3. IN GENERAL, THE INDIVIDUAL COMPONENTS CREATING THE AIR BARRIER SYSTEM WILL INCLUDE:
  - 3.A. THE CONCRETE FLOOR SLAB
  - 3.B. CONCRETE FOUNDATION WALLS
  - 3.C. THE EXTERIOR PLYWOOD WALL SHEATHING
  - 3.D. SILL PLATES OF EXTERIOR WALLS
  - 3.E. TOP PLATES OF EXTERIOR WALLS (LOWER PLATE OF DOUBLE TOP PLATE)
  - 3.F. THE SOLID WOOD FRAMING AT WINDOW AND DOOR ROUGH OPENINGS
  - 3.G. THE WINDOW AND DOOR FRAMES
  - 3.H. THE SHEET GOOD OR RIGID MATERIAL AT INSULATED CEILINGS
  - 3.I. TAPES, GASKETS, SLEEVES, CAULKS, SEALANTS, AND FOAMS USED AT JOINTS, PENETRATIONS, AND CONNECTIONS.
4. THE DETAILS ON THIS PAGE ILLUSTRATE SOME OF THE TYPICAL MATERIALS, ASSEMBLIES AND METHODS USED FOR AIR SEALING, AND EMPHASIZE THE CRITICAL CONNECTION METHODS USED TO ENSURE THE CONTINUITY OF THE AIR BARRIER SYSTEM.
5. IF FOLLOWED, THE DETAILS ON THIS PAGE WILL HELP ENSURE THAT THE BUILDING AIR TIGHTNESS TARGET IS MET.
6. THE ILLUSTRATIONS ON THIS PAGE ARE NOT THE ONLY DETAILS OR SPECIFICATIONS TO BE USED TO ACHIEVE THE AIR TIGHTNESS TARGET AND DESIRED BUILDING PERFORMANCE. CRITICAL INFORMATION IS CONTAINED IN ANY DETAIL OR SPECIFICATION DEFINING A JOINT OR TRANSITION BETWEEN DISSIMILAR MATERIALS.
7. BREACHES IN THE AIR BARRIER DO NOT JUST "LEAK AIR." THEY ALLOW HEAT AND MOISTURE TO MOVE INTO OR ACROSS THE CONSTRUCTION ASSEMBLIES THROUGH UNINTENDED PATHWAYS. UNWANTED MOVEMENT OF AIR, HEAT AND MOISTURE CAN REDUCE BUILDING PERFORMANCE; POTENTIAL PERFORMANCE ISSUES INCLUDE OCCUPANT DISCOMFORT, HIGHER ENERGY BILLS, MOLD GROWTH, AND MATERIAL DETERIORATION.

Disclaimer: These details were developed for use with designs and specifications created by and for Green New Deal Homes. Licensed use of these standard details are offered as technical assistance to the Licensee for their project, a home not designed by Green New Deal Homes. It is the responsibility of the Licensee to verify the suitability and compliance of these standard details for use with the Licensee's intended design and construction, local site and climate conditions, and code requirements; and to obtain any engineering or other professional services necessary to meet the local conditions and requirements of the specific project.



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## STANDARD DETAILS PACKET

**SD0.4**  
AIR SEALING DETAILS  
DATE: 6/17/22