····· PARTY WALL







- 1. APPLY ELASTOMERIC CAULK (STO RAPID SEAL OR SIMILAR) WHERE JOIST MEET MASONRY WALL.
- 2. APPLY 'STO GOLD' FLUID APPLIED MEMBRANE TO PARTY WALL BRICK
- 3. HOLD PLYWOOD SUBFLOOR OFF PARTY WALL TEMPORARILY TO ALLOW CONTINOUS APPLICATION OF AIR SEAL IN JOIST BAY
- 4. EXISTING PARTY WALL
- 5. STRUCTURAL MEMBER BEYOND
- 6. DOUBLE C-JOISTS TAPE ENDS BEFORE SETTING IN POCKET, FILL IN AT POCKET SOLID WITH CLOSED CELL SPRAY FOAM

EXTERIOR WALL

- The relationship between air barrier, insulation + fenestration is key to passive principles.
- These areas are critical to avoid thermal bridging.



**NOTE: in a landmarked district, the historic Front door must remain. A strategy to air seal the vestibule was developed to avoid a large compromise in the air barrier.

EXTERIOR WALL

PHOTOS: TACONIC BUILDERS



PROCESS OF EXTERIOR WALL INSTALLATION / AIR BARRIER APPLICATION

EXTERIOR WALL



- 1. EXISTING FRONT MASONRY WALL
- 2. AIR BARRIER CONTINUOUS TO NEXT FLOOR. INSTALLED PRIOR TO DECKING AND WALL FRAMING
- 3. NEW WOOD FRAMING
- 4. PLYWOOD SUBFLOOR
- 5. SECONDARY JOIST/NAILER TO SUPPORT SUBFLOOR AFTER CONTINOUS AIR BARRIER IS COMPLETED
- 6. ANCHORS TO WALL AS REQ'D
- 7. NEW WOOD JOIST TIED BACK TO EXISTING MASONRY WALL WITH BLOCKING
- 8. INSULATE CAVITY BETWEEN MASONRY WALL AND FIRST JOIST (INFILL BETWEEN BLOCKING) WITH SPRAY FOAM OR RIDIG INSULATION
- 9. MIN. 1/2" GAP BETWEEN MASONRY WALL AND BACK OF STUD
- 10. 3 1/2" X 1 1/2" ENGINEERED STUDS



*NOTE: A DETAIL AT THE FIRST AND LAST JOIST WAS DEVELOPED TO ACCOMPLISH TWO GOALS:

- 1. BREAK THE THERMAL BRIDGE AT THE FIRST JOIST
- 2. PROVIDE A CLEAN NAILER FOR BRIDGING THAT WOULD PROTECT THE AIR BARRIER MEMBRANE.

DETAIL @ FIRST FLOOR JOIST AT FRONT/REAR WALL

11.11/2 BATT INSULATION

- 12. MIN. 4" OF DENSE PACKED CELLULOSE INT. AIR BAR.
- 13. TAPE + SEAL ALL SEAMS
- 14. 3/4" X 1 1/2" COUNTER BATTING LAID VERTICALLY TO SECURE AIR BARRIER
- 15. 3/4" X 1 1/2" NAILER LAID HORIZONTALLY FOR SECURING GWB + ACT AS 1 1/2" SERVICE CAVITY FOR ELECTRICAL/PLUMBING
- 16. 5/8″ GWB.



BAXT

ROOF

- The top of the envelope where many mechanical, electrical, and plumbing penetrations occur.
- This is a surface area where a large heat gain or loss can occur, so proper build up and detailing is essential.
- Review of proposed structural schemes is vital in regards to thermal building + subsequent energy transfer.
- Rain + water control



ISSUE:

Typical insulation below roof does not block heat from entering.

SOLUTION:

Insulate at both above + below roof system; this will block heat transfer from the exterior.

NYC allows up to 8 inches of insulation above the max building height.





-ROOF

PHOTOS: KLEEN CONSTRUCTION, P JOE CONSTRUCTION





CEILING / ROOF AIR BARRIER APPLICATION

