

## 07 20 00 | Thermal Insulation

Section includes various guidelines for the treatment of roofing, dampproofing and waterproofing, and thermal protection.

This design guideline is written to the designer of record (DOR). This guideline is written to document UA standards of work, assist the designers in ensuring UA standards are incorporated into the contract documents and provide a resource to facilitate the design process. It is the designer of record's responsibility to coordinate the criteria set forth in these design guidelines and in conjunction with the manufacturer requirements and use the most stringent standard.

### General

For all new construction projects and renovation projects that modify the exterior envelope of a building, the Architect must submit documents and energy analysis that verifies compliance of the project with the State Energy Code as well as ASHRAE 90.1-2010. All roofing materials shall be asbestos free.

### Building Insulation

1. All insulation shall be full depth.
2. All new walls around offices, conference rooms, classrooms, toilets, mechanical, electrical and janitor rooms shall be provided with sound insulation.
3. All sound insulation walls shall extend full height to underside of floor above or to roof deck.
4. Avoid installing insulation on top of lay-in ceilings
5. Avoid insulation installed in concrete block cells. If insulation is required at single wythe exterior masonry walls, provide spray-foam insulation in all unfilled masonry cells.
6. Vapor permeable spray-foam insulation with Class 1 flammability is acceptable for use in exterior walls. Approved spray-foam manufacturers are: BASF Corp., Dow Chemical, ER Systems Inc., Capolla Industries, and Certainteed Corp.
7. Fill voids in stud framing around windows and door openings with spray foam at exterior walls.

### Exterior Insulation Finish, Exterior Gypsum Board and Stucco

1. Designer shall be responsible for designing a warrantable, single source exterior finish system (including all components of the system) that complies with the manufacturer's recommendations.
2. The use of Exterior Insulation Finish Systems (E.I.F.S.) is to be avoided on all exterior vertical wall surfaces. Special conditions requiring E.I.F.S. or vertical surfaces will be reviewed by The University of Alabama for final approval.
3. E.I.F.S. usage is accepted for simulating exterior decorative detailing or for suspended soffit areas only.
4. The use of exterior gypsum board material is not acceptable for soffits or other exterior uses.
5. Integral color finish coat stucco is preferred material for use on wall surfaces and soffits in lieu of E.I.F.S.



6. Provide control joints at all stucco applications with spacing not to exceed 10 feet.
7. Approved E.I.F.S. and stucco manufacturers: STO, PAREX, Synergy, and Dryvit.

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