

# What to Look for Series Slab on Grade Insulation

**When is it required?**

**What is the requirements?**

**How should it be shown on the plans?**

**How should it be installed in the field?**

**What should I be looking for?**



# **When is slab on grade (slab edge) insulation required and what are the requirements?**

## **Unheated Slab**

### **Commercial - C402.2.4 (2018) C402.2.4 & C402.2.4.1 (2021)**

- Slabs that are 24" or less below grade must comply
- Shall be located on the interior or exterior side of the foundation
- Must start at the top of the slab and continue for the distance listed in Table C402.1.3, or to the top of the footing, which ever is less
- Must be installed in an approved configuration
- Must install the minimum R-value from Table C402.1.3

### **Residential - R402.2.10 (2018) R402.2.9 & R402.2.9.1 (2021)**

- Slabs that are 12" or less below grade must comply
- Shall be located on the interior or exterior side of the foundation
- Must start at the top of the slab and continue for the distance list Table R402.1.2(2018) or Table R402.1.3(2021) or to the top of the footings, which ever is less
- Must be installed in an approved configuration
- Must install the minimum R-value from Table R402.1.2(2018) or Table R402.1.3(2021)

## **Heated Slabs**

### **Commercial Table C402.1.3 and**

### **Residential Foot Note d Table R402.1.2(2018) and Table R402.1.3(2021)**

- Minimum R-5 insulation shall be installed under the entire slab
- Slab edge insulation not required to extended below the slab

### **Exposed Foundation Insulation Protection C303.2.1 or R303.2.1**

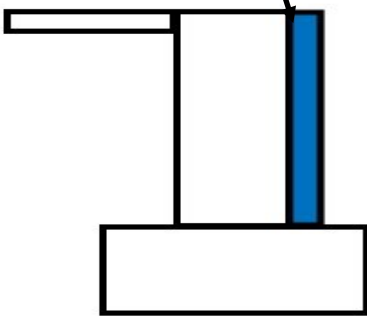
- Exposed foundation insulation will require a protective covering that must extend a minimum of 6 inches below grade



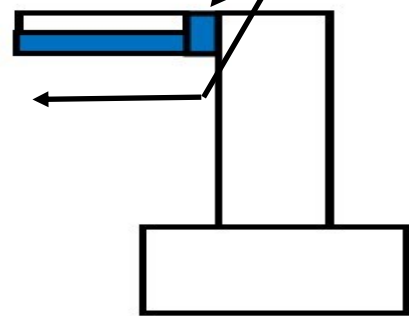
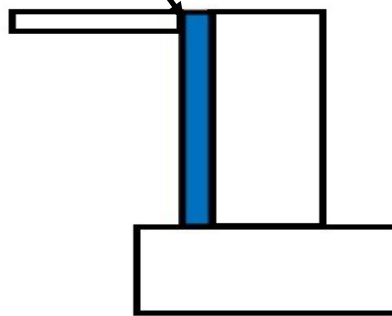
# Slab on Grade (Slab Edge) Insulation Installation

## UNHEATED SLAB COMMON APPROVED INSTALLATION CONFIGURATIONS

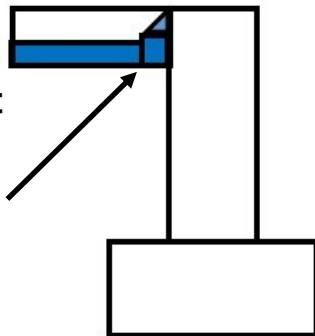
Insulation starting at top of slab extending to top of footing at exterior and interior of foundation



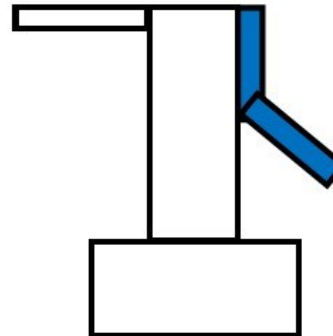
Insulation starting at top of slab extending to bottom of slab and extends under the slab for the required distance



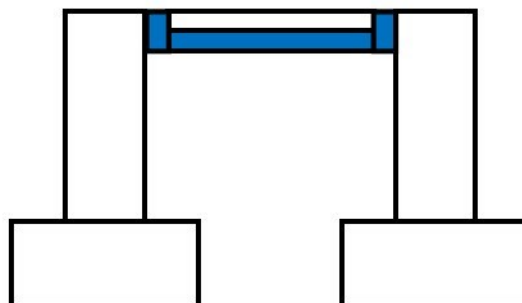
45 degree angle at top of insulation angled away from exterior wall



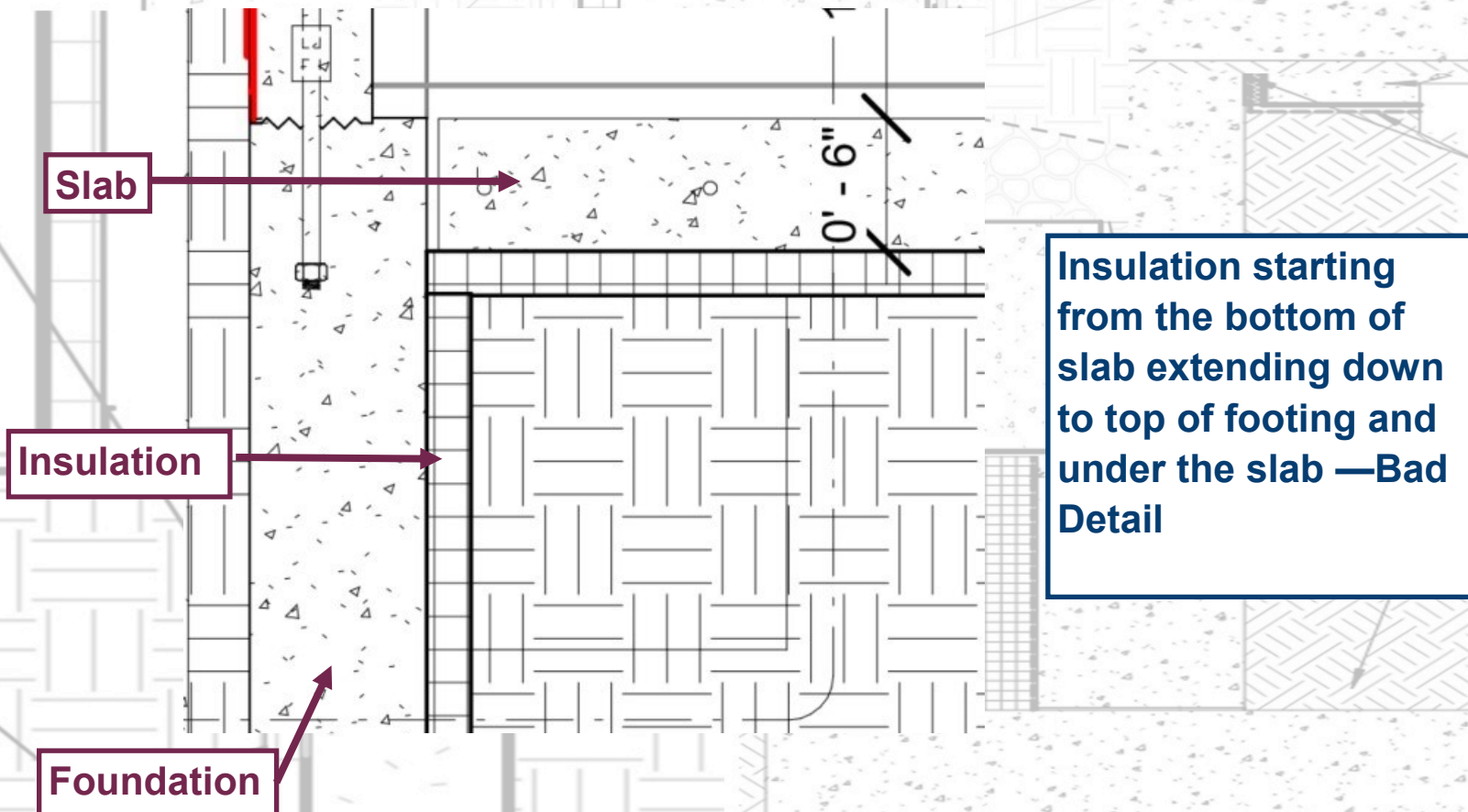
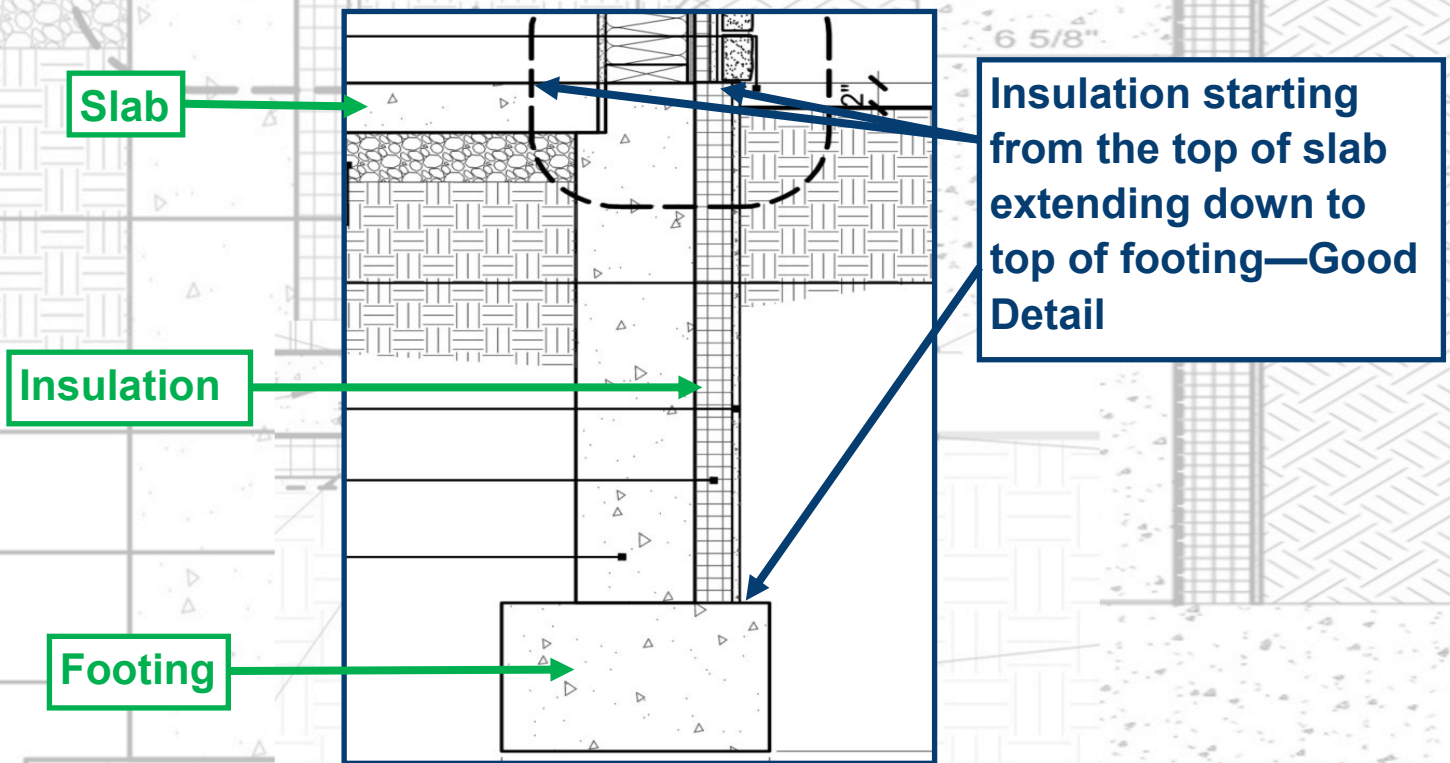
Insulation that extends away from the building shall be protected by pavement or 10" of soil



## HEATED SLAB COMMON APPROVED INSTALLATION CONFIGURATION



# Slab on Grade (Slab Edge) Insulation for Plan Review





# Slab on Grade (Slab Edge) Insulation for Plan Review

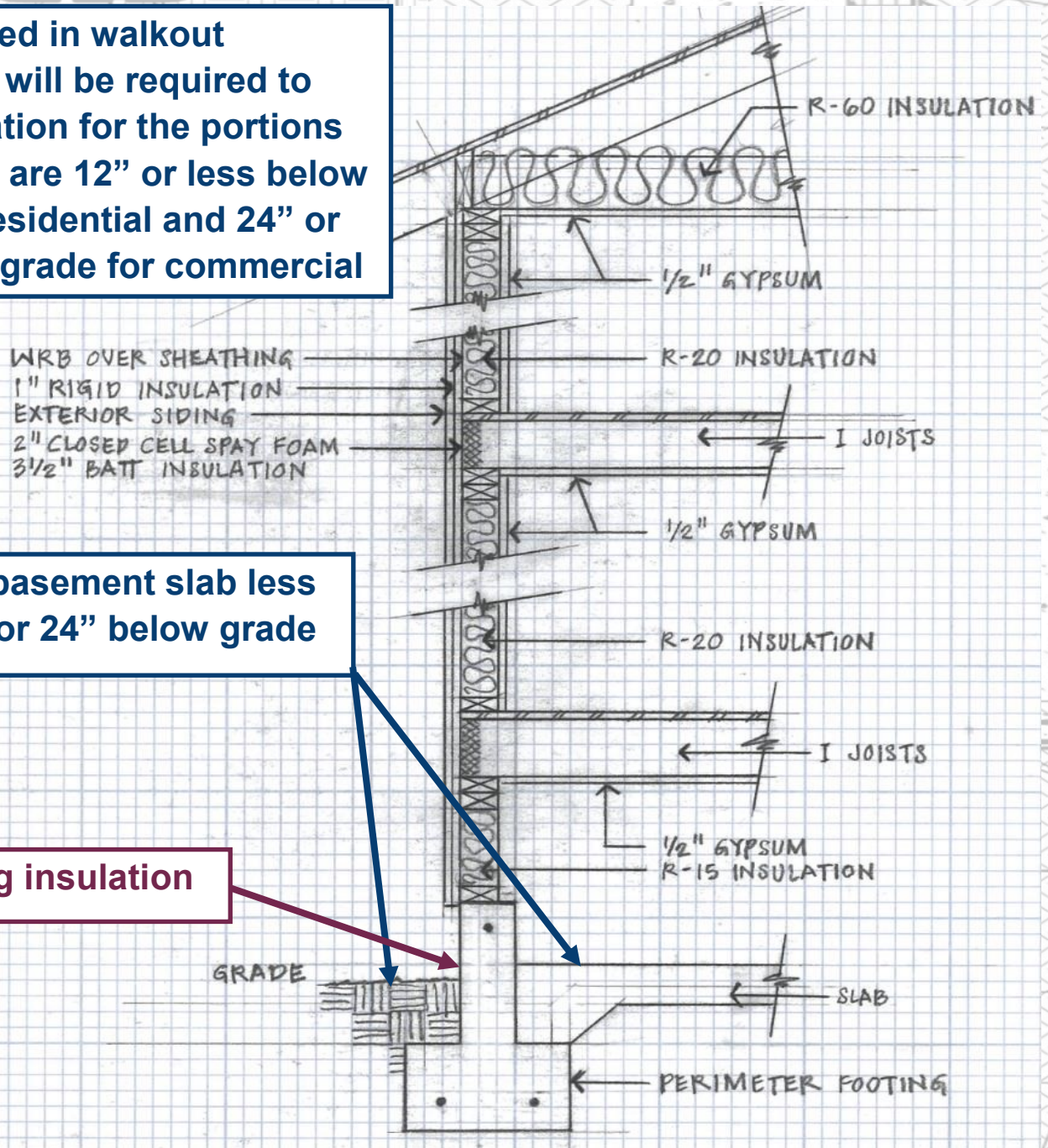
## WALKOUT BASEMENTS

Slabs located in walkout basements will be required to have insulation for the portions of slab that are 12" or less below grade for residential and 24" or less below grade for commercial

Walkout basement slab less than 12" or 24" below grade

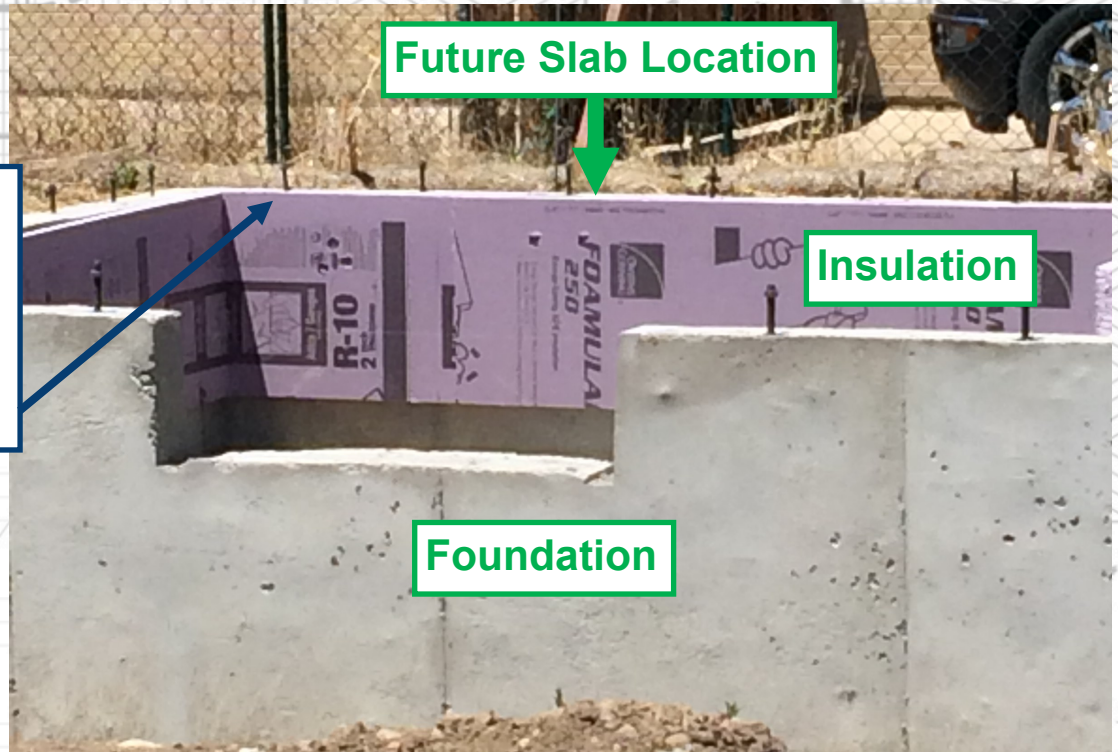
Missing insulation

Required to have slab on grade (slab edge) insulation, and it is missing on this plan detail





# Slab on Grade (Slab Edge) Insulation for Inspection



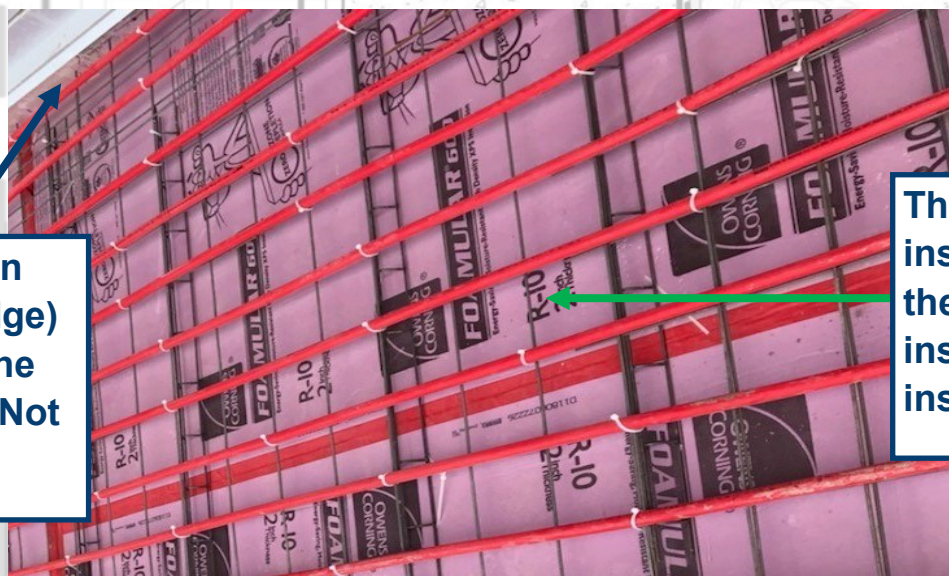
Slab on grade (slab edge) has been started at the top of where the slab will be once poured- Good install

Future Slab Location

Insulation

Foundation

## HEATED SLAB



Is there slab on grade (slab edge) insulation at the foundation? - Not sure

The minimum R-5 insulation under the slab has been installed - Good install



# Slab on Grade (Slab Edge) Insulation for Inspection



Insulation installed at top of foundation on the exterior side of the foundation and where the slab will be poured. - Intent good

Insulation has been damaged in locations

Insulation located on the exterior side of foundation and is exposed. Should have protection that extended into grade for 6" - Not a good install

