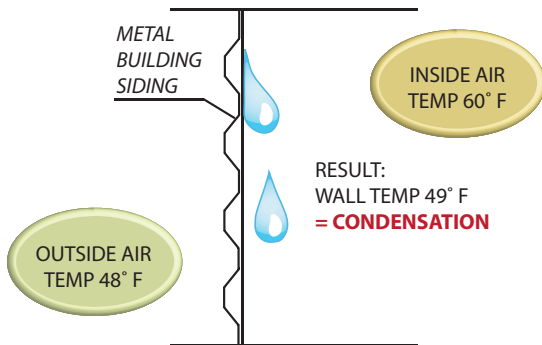


## Condensation Control Blanket (CCB)

CCB is a fiberglass blanket laminated to a white vinyl or reinforced vapor barrier intended for use in the roof and walls of post frame and metal buildings. CCB is typically applied directly under the roof and wall sheeting to help prevent the formation of condensation on the interior surface of the metal. The scenarios below demonstrate when condensation can form and how CCB prevents it from forming.

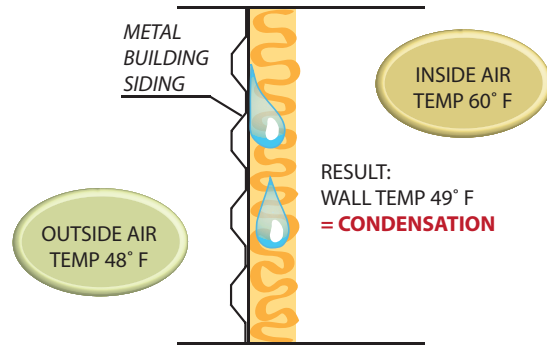
Suppose the outside temperature is 48 degrees, the inside temperature is 60 degrees and the relative humidity is 80%. The dew point or the temperature at which moisture in the air will condense from a gas to a liquid, would be 45 degrees.

*Without Insulation or Vapor Barrier*



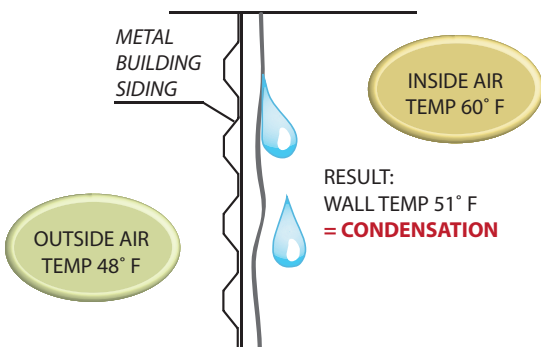
Without insulation or vapor barrier, the inside metal surface would be 49 degrees, below the dew point, which would result in the formation of liquid.

*With Insulation Only (No Vapor Barrier)*



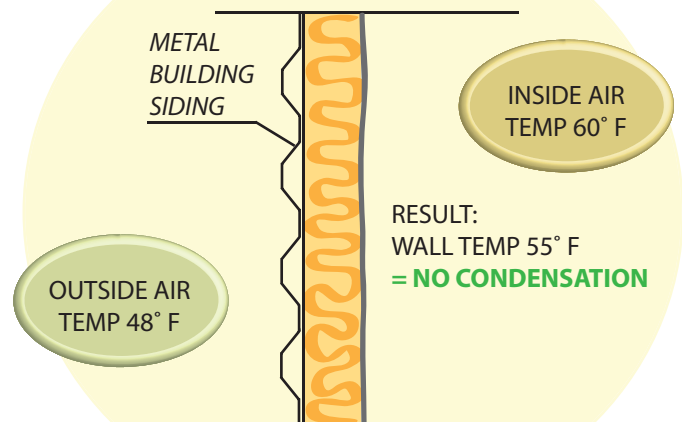
With insulation but no vapor barrier, the inside surface of the insulation would be above the dew point and moisture would penetrate to the metal surface, turn to liquid and saturate the insulation.

*With Vapor Barrier Only (No Insulation)*



With a vapor barrier but no insulation, the moisture would not reach the metal, but the surface temperature of the vapor barrier would be 51 degrees, below the dew point, causing liquid to form on the surface of the vapor barrier.

*With Insulation and Vapor Barrier*



With insulation and vapor barrier, the moisture is stopped from reaching the insulation or metal. The insulation keeps the surface temperature of the barrier at 55 degrees, above the dew point, so the moisture remains in gas form rather than turning to liquid.