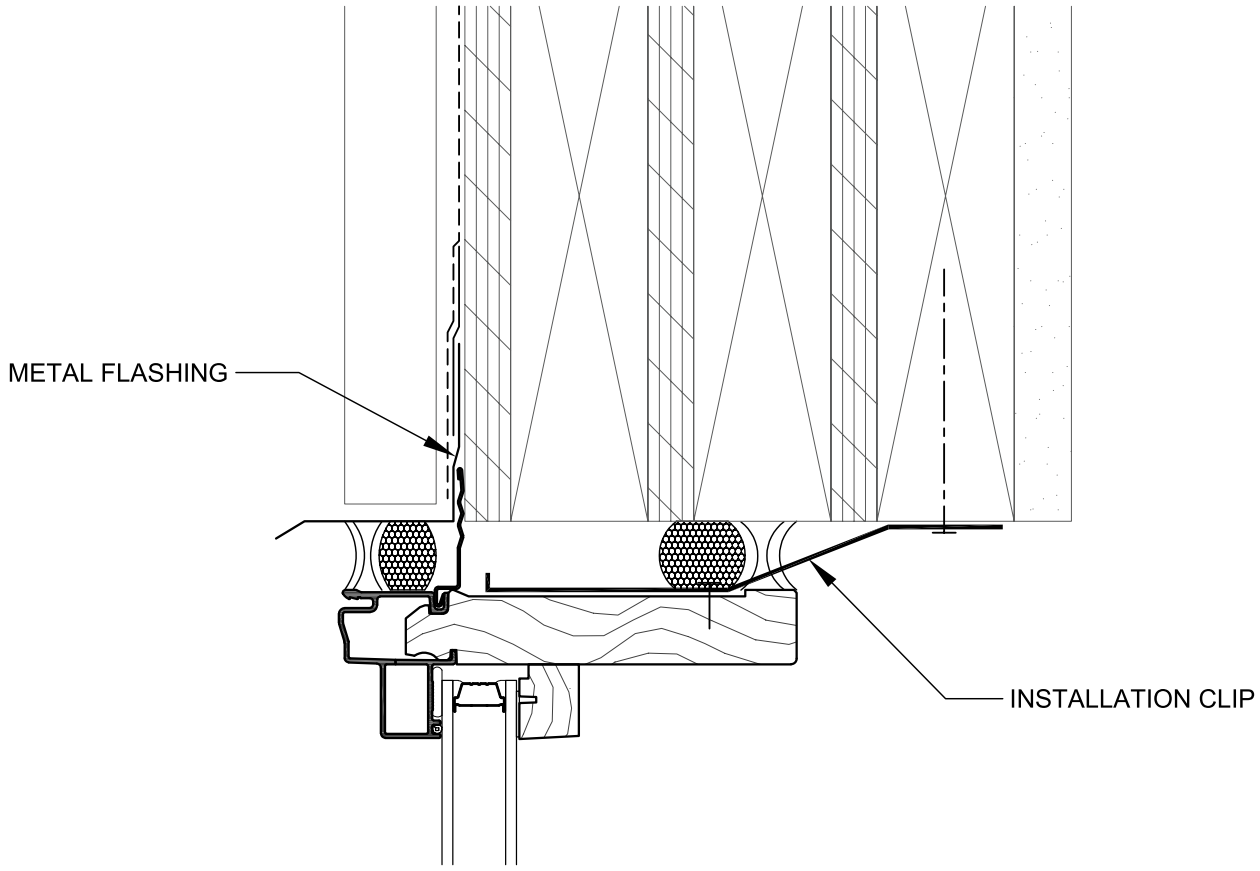
TECHNOTES

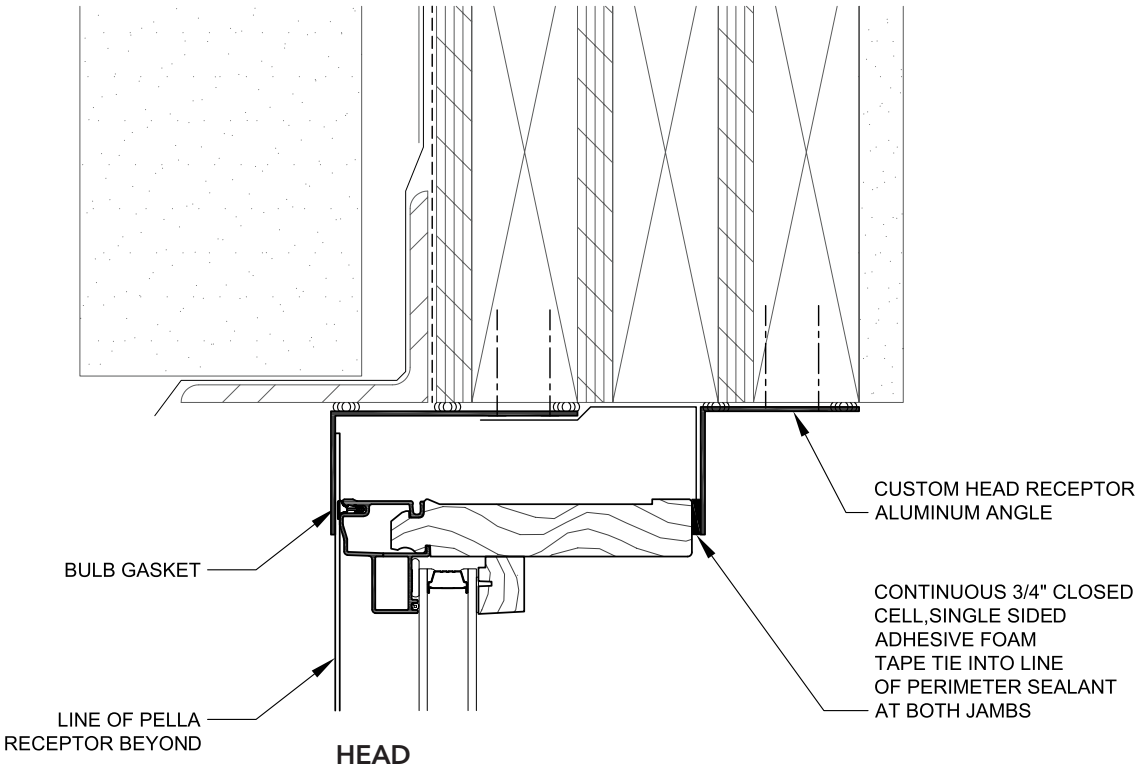
Header Deflection and Wood-Frame Shrinkage Detailing Options

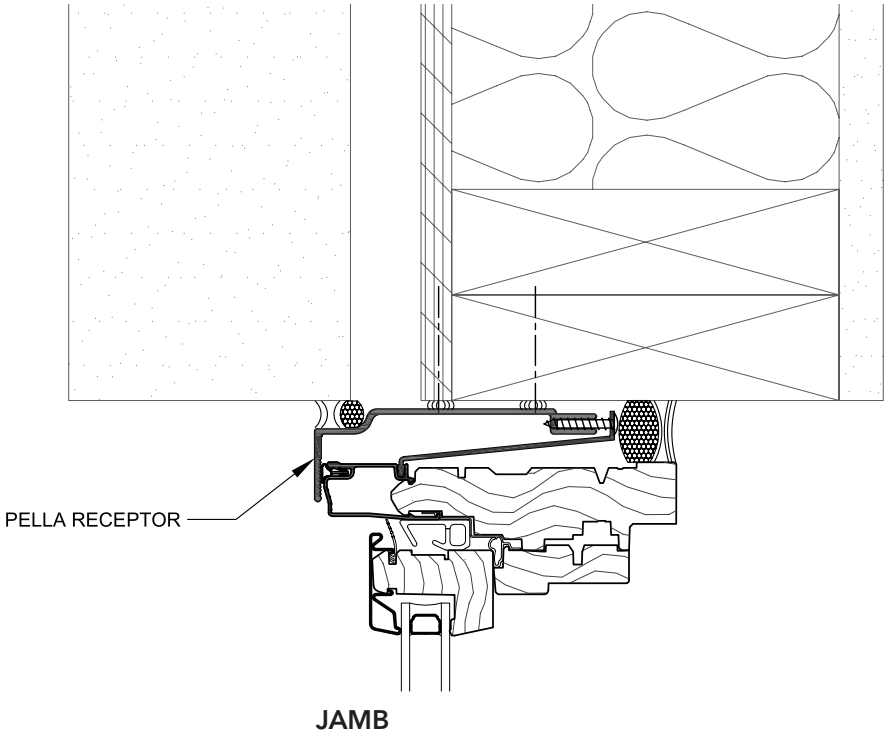
The purpose of this Technote is to provide potential solutions for conditions where a significant amount of differential movement must be accommodated. Differential movement is simply when one building element moves in relation to another.

One condition that can be cause for the need to accommodate differential movement is excessive header deflection. Excessive deflection in a header can occur as a result of long structural spans, heavy loading conditions, or structural header design. This is typically minimal in dimension; however, there can be demand for an allowance for some amount of movement. Considerations in detailing for this type of application is with structural attachment that allows movement and adequate space to allow sealant lines to compress.



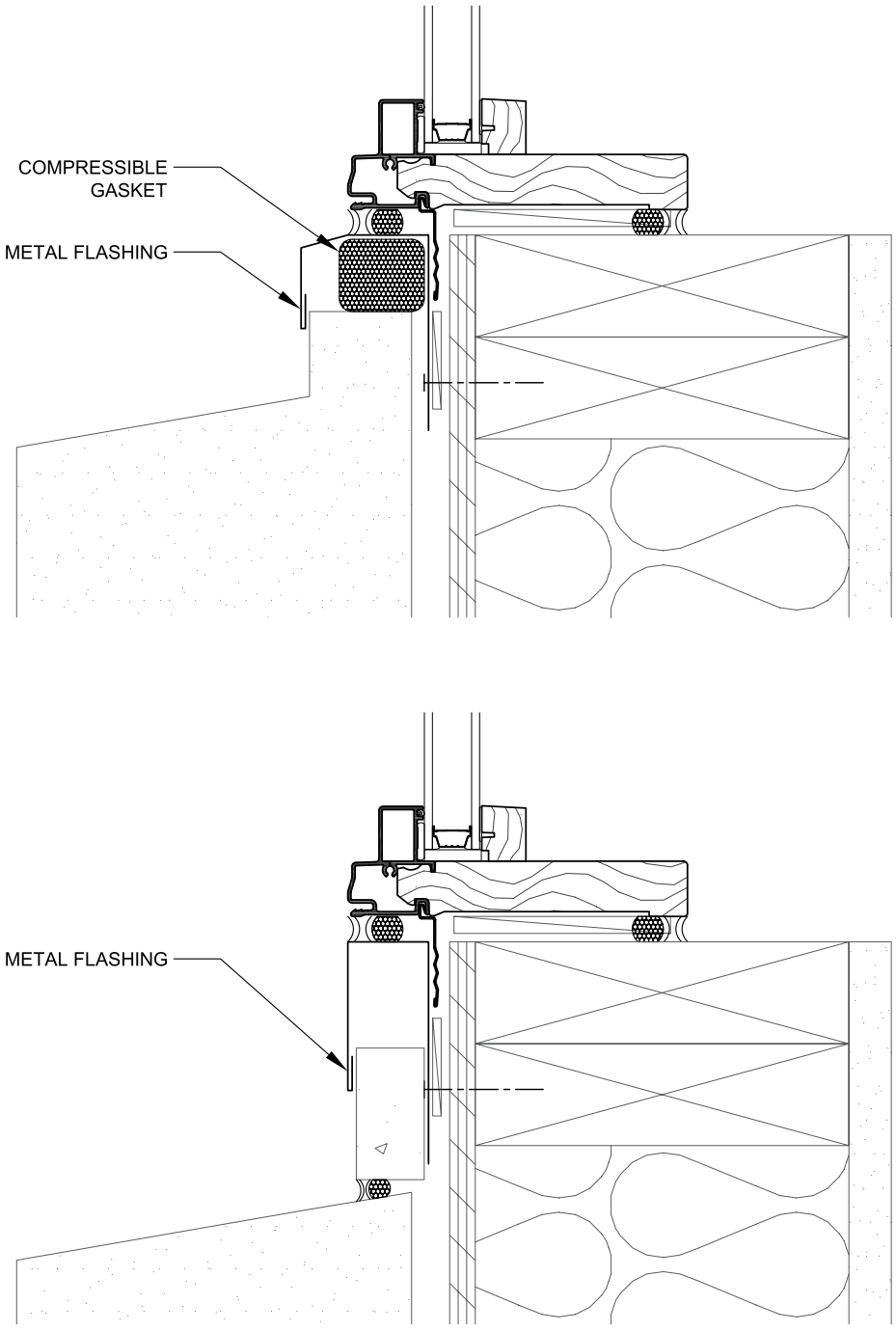
Example of a head detail that addresses minimal header deflection.



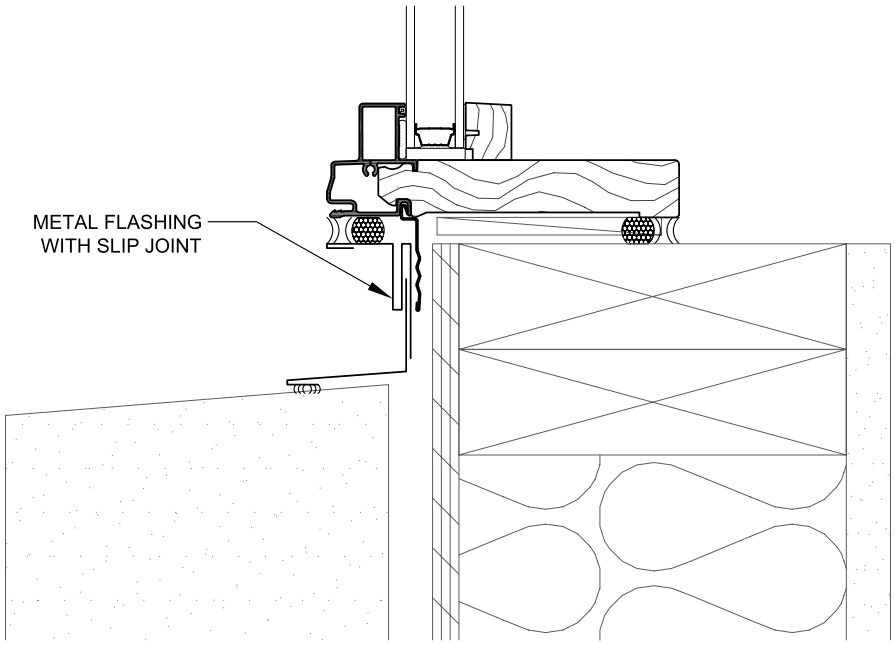


Example of installation detailing that allows for increased header deflection.

Another condition is differential movement between wood-framed or timber walls and masonry wall cladding. This movement is caused by wood drying or what is referred to as wood-frame shrinkage. The amount of shrinkage that occurs increases incrementally by floor or compounds as the height of the building increases. For example, the amount of differential movement that could occur at a first floor might be 1/4" and increase incrementally by level until the amount of movement caused by shrinkage could reach 2" on say a sixth floor.



Examples of slip joint details at a sill that address differential movement caused by wood-framed shrinkage.



Examples of slip joint details at a sill that address differential movement caused by wood-framed shrinkage.