A stress relief joint is a general term to describe reducing stress (cracking) in portland cement plaster. Historically the relief was done by scoring the plaster (like you would score concrete). However, modern methods of stress relief involve stress relief accessories. These accessories include control joints, expansion joints and reveals.

**CONTROL JOINT:**
A one-piece accessory is generally made from galvanized steel or exterior-grade plastic. By definition, a one-piece reveal (made from aluminum, steel or exterior grade plastic) is also considered a control joint. However, the control joint can be made of other products providing they meet the definition of the code. Per ASTM C1063, a control joint “shall be installed to minimize stress due to stucco curing and drying shrinkage and minor movement, along predetermined, usually straight lines and as a screed to aid in stucco thickness control.” They are installed to keep the size of plaster panel on a wall no larger than 144 square feet, as square as possible and shall not exceed 18 feet in either direction with a maximum ration of 2 ½ to 1. Ceiling panels should be no larger than 100 square feet and installed whenever the ceiling framing changes direction. Wall or partition height door frames are also considered control joints.

**EXPANSION JOINT:**
ASTM C1063 defines expansion joints to be “used to accommodate some degree of movement in the stucco membrane cause by movement of the building or its components to minimize damage to the stucco and water resistive barrier”. The joint shall be installed when anticipated stress from building movement exceeds the performance of the plaster assembly. The structural engineer shall provide where expansion joints may be necessary and installed where an expansion joint occurs in the base wall. This two-piece accessory is normally made of galvanized steel, aluminum or other materials. However, in order for expansion joints to perform correctly the wall framing also must accommodate the same degree of movement. Back-to-back casing beads with a backer rod and sealant may also perform as an expansion joint. The width of the gap should be from 3/8 inch to 1 inch.

**GENERAL NOTES:**
Location of stress relieve joints are recommended at floor joints, where changes of substrate occur and off the corners of windows and doors. When portland cement plaster is directly applied over concrete masonry units or concrete, no stress relief joints other than those at locations of the structural masonry joints are required. However, they may provide good start and stop locations for plastering (See Bulletin 60.210).