



Technical Bulletin

CRACKING IN GYPSUM DRYWALL SURFACES

Cracking in stucco, plaster and concrete construction is a common occurrence that is typically not only tolerated, but is accepted. Cracking in gypsum drywall surfaces however, is considered a defect in the system requiring complete and expert repair.

The most common area for cracking is in the center of the drywall joint and is commonly defined as "Center Cracking". While there are various contributing factors, it can be logically argued that the overwhelming majority of these cracks do not occur without movement. Such movement may be related to the gypsum substrate itself or more commonly, to the structural components over which the board is applied. The severity of the movement determines the extent of the crack, ranging from very fine "hairline" defects to fissures of 1/8" or more.

The function of a drywall joint is cosmetic, not structural. It is understood that a crack in that joint is a defect, but there is no standard as to how much movement and/or force the joint should withstand prior to failure. It becomes very difficult therefore, to determine the primary cause of the crack and who is responsible for repair costs. For example, because we accept the fact that movement occurs in all structures, the next question is how much does the structure have to move to consider drywall cracking as a "structural" or "design" problem rather than a "drywall" problem? It is quite evident that every crack in drywall is neither the result of defective drywall finishing products nor improper application of those products.

While Hamilton cannot inspect each instance of cracking nor profess to know the cause of every crack, we will continue our research into minimizing the problems as they relate to our products. We invite the participation, advice, and input from all interested parties within the drywall industry as well as parties having expertise in structure and design. We particularly invite the consideration of all parties to effect that job conditions play in expansion, contraction and movement within the construction process from soil compaction through final decoration.

As a service to the industry we have prepared technical bulletins regarding recommended drywall application and finishing techniques, which should minimize cracking. Also available are recommendations regarding the repair of cracking by various methods.