



# Technical Bulletin

## WINTER IS COMING – PART III

Several years ago (9/97) we advised the users of our products of the negative effects of low temperatures and moisture on drywall finishing materials. Over the past three to four winters severe cosmetic cracking has occurred throughout the marketplace.

We have been proactive in efforts to determine the cause(s) of these cracking problems, and were instrumental in the formation of a group to study the construction process for possible solutions. While no single factor could be isolated it became evident that a high percentage of the cracking can be avoided by improving job conditions, proper scheduling, and proper application of the gypsum wallboard.

### **JOB CONDITIONS**

All industry recommendations require that the structure be heated to a minimum temperature of 50° F for a period of 48 hours prior to the application of gypsum wallboard and 60° F during application of finishing products, and maintained at that temperature through completion (final decoration). We further recommend that new unoccupied structures be stabilized at 50° F minimum until occupied.

Without a doubt the preferred method of heating is to utilize the forced air units installed in the structure. These systems not only provide heat, but also expel moisture. The use of diesel or kerosene heat can produce discoloration. Propane fueled space heaters actually produce 7.8 pounds of water per gallon of propane burned. This adds moisture to the site making adequate ventilation difficult but very necessary.

It should be noted that all so-called “space heaters” regardless of fuel do not provide heat evenly throughout the job. It is extremely important that minimum temperatures be maintained continuously and ventilated adequately to remove moisture.

### **PROPER SCHEDULING**

In some areas, as little as three days is scheduled for drywall finishing and texture application. We recommend at least seven days for these procedures. It should also be noted that painting specifications are consistent with drywall finishing regarding temperature and drying recommendations.

### **APPLICATION**

A preponderance of cracking observed on walls takes place on “rips” or “belly bands” which presents a joint with at least one cut edge and many times, both cut edges. There is no known way these joints can be treated to produce a joint equal in strength to those comprised of paper wrapped “factory” edges.

### **SUMMARY**

With the experience gained over the past several years and the knowledge that we will face severe weather in the future, we want our customers to be fore warned of the possible problems. Fortunately, we see some positive actions in some market areas. Builders, Sub-contractors, and building Officials are paying attention. We are not manufacturers making excuses; we are concerned suppliers to the industry, attempting to provide meaningful information to our customers.