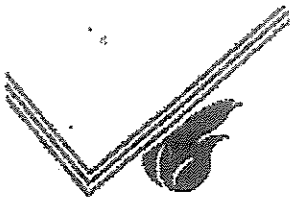

GYPSUM ASSOCIATION

July 11, 1996

Ms. Debbie Morales
Technical Services Representative
The Celotex Corporation
P.O. Box 31602
Tampa, FL 33631

Dear Ms. Morales:

This letter is in response to your inquiry regarding the probable effect of the addition of wood fiberboard panels to a gypsum-based fire-rated system not tested with such cellulosic panels. These wood fiberboard panels sometimes are used to increase the thermal or sound insulative value of a system.

Comparing GA File WP 3330 and WP 3510 found in the 14th edition of the Gypsum Association's *Fire Resistance Design Manual* indicates that the addition of the fiberboard panels has little, if any, negative effect on fire resistance. The same should hold true for a system rated for a two-hour fire resistance. This assumes that the fastener length has been increased to compensate for the additional thickness of the system.

These observations are consistent with generally held fire protection theory and are somewhat further described in Dr. Tibor Harmathy's "Ten Rules of Fire Endurance" that may be found in ASTM Special Technical Publication STP 685, "Design of Buildings for Fire Safety," and the *Fire Protection Handbook* published jointly by the Society of Fire Protection Engineers and the National Fire Protection Association. Also, the addition of wood panels is specifically allowed in the *Uniform Building Code* (UBC) via Footnote 14 to Table 7-B on the fire resistance of walls. The UBC is the predominant model building code used west of the Mississippi and in other jurisdictions. The fundamental observations made by the UBC should be considered quite universal in nature.

If you have any additional questions, please feel free to contact me.

Sincerely,

Karl D. Houser

Karl D. Houser
Fire Protection Engineer
Director, Code and
Technical Services