07 00 00 – Thermal and Moisture Protection

1. General

A. The Consultant must consider the effects of environmental design factors, that is, the degenerative forces exerted on roofing systems and wall systems by exterior and interior conditions. These forces include sunlight exposure, rainfall, ice, snow, wind, the chemical environment and the installation environment. The task is to select components that will withstand such environmental factors and integrate these components into a complete system.

1. Building occupancy factors should be considered in the design of roofing systems and wall systems. Humidity and occupancy help determine the necessity for vapor retarders and venting. Waste spillage and exhaust onto roof surfaces should be considered with regard to the resistance of the membrane as well as the need for cleaning and washing of the roof surface. Flexibility should be designed for possible occupancy changes that would shift conditions in the building from low humidity to high humidity. Any occupancy with a chemical function, such as laboratories, will require special consideration. The system should be designed so that temperature and relative humidity can be controlled. Particular attention must be paid to operating costs.