Subject: Metal Roofing
Date: January 2008

R-Control SIP roofs can be finished with a wide range of roofing products. Metal Roofing is one type of roof covering that has been used successfully over R-Control SIPs for many years. Metal roofing provides a water tight roof system and has a long life expectancy when compared to many other roofing systems. One major advantage of metal roofing is that minimal maintenance is required over the life of the roof.

As with all roofing materials, the installation must be in compliance with the metal roofing manufacturer’s recommended installation details. The primary consideration when installing metal roofing over R-Control SIPs is to ensure the roofing manufacturer provides installation recommendations for installation into the 7/16" OSB facing of the R-Control SIP. Some metal roofing manufacturer’s may request an increase in the R-Control OSB facing thickness to 5/8” to meet their installation requirements or alternatively the installation of wood nailers on the R-Control SIP. The reason for this is that their installation recommendations and engineering is based upon the thicker substrate that the 5/8” deck or nailers provide.

MBCI, a leader in the metal roofing industry, has reviewed their roofing products and can provide installation recommendations for the installation of their roofing products directly into the 7/16” OSB facing of R-Control SIPs. Following these installation recommendations provides assurance that the roofing materials will provide the long term durability that is expected when metal roofing is selected.

An additional consideration when installing any roofing material is to ensure that excessive temperatures are not transferred to the R-Control SIP roof deck. While metal roofing has a higher emissivity rating than other roofing materials and is available with paint finishes that have a higher reflectivity than most other roofing materials, under some conditions there is a potential for excessive temperatures between the SIPS roof deck and the roof membrane. This could cause an R-Control SIP roof deck to exceed its safe use temperature. When installing metal roof systems over R-Control SIPs, additional design considerations may be necessary to protect the roofing underlayment and the R-Control SIP from excessive temperatures. These design strategies may include the use of a ventilated air space above the R-Control SIP to minimize temperature exposure. Consult your local R-Control representative for specific recommendations for your geographical location and building design.