

## Manufacturing of Vacuum Glazing with Metal Edge Seal

**Authors :** Won Kyeong Kang, Tae-Ho Song

**Abstract :** Vacuum glazing (VG) is a super insulator, which is able to greatly improve the energy efficiency of building. However, a significant amount of heat loss occurs through the welded edge of conventional VG. The joining method should be improved for further application and commercialization. For this purpose VG with metal edge seal is conceived. In this paper, the feasibility of joining stainless steel and soda lime glass using glass solder is assessed numerically and experimentally. In the case of very thin stainless steel, partial joining with glass is identified, which need further improvement for practical application.

**Keywords :** VG, metal edge seal, vacuum glazing, manufacturing,

**Conference Title :** ICES 2015 : International Conference on Energy Systems

**Conference Location :** Singapore, Singapore

**Conference Dates :** January 08-09, 2015