Ceramic tiles are a traditional material for roofs and façades in the sunny and hot climate of Spain. They buffer heat, absorb humidity during the night and evaporate it again during the day, producing a cooling effect. A new façade system called Flexbrick involves ceramic tiles which have tubular channels to reduce their weight and enhance their temperature-regulating capability. Lateral grooves make it possible to insert them into a grid of woven stainless steel. The staggered arrangement leaves 50% of the surface open which is an ideal proportion to allow air and daylight in but keep excessive heat out. Potentially high wind loads and demanding durability requirements call for an intrinsically corrosion resistant material like stainless steel. The coastal atmosphere made higher-alloyed grade 316 the most appropriate option. This is another example of stainless steel bringing out the best in partner building materials.

Picture courtesy of Flexbrick