Rather like the Lego sets one used to play with as a child, the humble shipping container has become a building block for a widening range of projects – retail stores, movable art galleries, public buildings, shopping malls, and full-fledged residences. A metaphor for the 21st century, the container is mobile, cosmopolitan, recyclable, and reusable. As containers shed the stigma of being mere cold, stainless steel boxes through the innovative work of architects, ISH takes a look at a snapshot of projects to get a whiff of this young and evolving branch of architecture.

This September, if you want to catch three of the largest indoor installations for the Singapore Biennale, you won’t be stepping into a typical building. Rather, a new architectural structure, the Containart Pavilion by Japanese architect Shigeru Ban, will be erected on the premises of the Central Promontory Site in Marina Bay. While Singapore is known for its rapid speed of construction, there’s another reason why the Containart Pavilion can be built fast – it’s made out of 150 Neptune Orient Lines shipping containers.

Container architecture has become a global phenomenon. Architecture firms around the world have increasingly adopted working with the ubiquitous and mass-produced ISO container, a by-product of globalisation and trade, easily available from ports around the world. Today, container architecture runs the spectrum of applications – art galleries, pre-fabricated homes, edgy retail stores, movable museums, community centres, and even entire malls.

Early conceptual projects contributed to the initial interest in container architecture and the recognition of its innate merits: containers are weather-resistant, easily assembled and stacked, mobile and reusable. Sean Godsell Architects’ Future Shack was a project started in 1985 that showed how containers could go beyond their original purpose of transportation.

Linked to a humanitarian goal of providing fast and effective emergency housing for victims in disaster-struck areas, Godsell made various modifications to the container. Packed within the container were water tanks, and the container could also be fitted with bathrooms and kitchens if necessary, while a small series of openable vents facilitated adequate ventilation. A makeshift verandah could be elevated from the roof structure of the container. Beyond its immediate functions of providing relief shelter, the Future Shack’s raised parasol roof symbolised, in its simplicity, a home, the proverbial roof over one’s head.

Despite the container’s considerable environmental and construction advantages, there were stigmas that architects needed to address. Do people really want to live, work or play in an enclosed steel box? Is the shipping container suitable enough to become a raw material for not just one-off conceptual projects, but for stores, schools and even homes? Few would find the industrial character of the container attractive. Creative solutions had to be pursued to transform the container into a livable space.

California-based firm DeMaria Design Associates’ work is proving the viability of container homes. Their example is relevant for architects working in countries where authorities might be unfamiliar with container architecture and its possibilities, and where architects may encounter difficulties in obtaining building permits. In 2007, the firm built the Redondo Beach House, a two-storey family residence in Los Angeles using eight containers. Peter DeMaria, the principal architect, had eight containers painted white, stacking them onto a concrete garage. Using a perpendicular arrangement, the composition of the containers evolved into a variety of spaces: the four larger containers house the library, bathrooms and large wardrobes, while the smaller container spaces are filled by the kitchen and bedrooms.
In Harlesden, North London, a children’s centre demonstrates how the application of shipping containers has developed. Moving away from earlier concepts of “fitting” an interior environment into a box, where the container’s size limits the design, containers have combined with other elements in building, and became part of a larger built environment.

Alsop Design, for instance, has incorporated shipping containers into a unique public building: the Fawood Children’s Centre, a nursery school for three to five-year-olds that includes facilities for autistic and special needs children. The project’s limited budget and time for building called for a “combination of built and adapted internal environments” to expedite the process. The architects designed a lightweight roof and mesh enclosure, while the internal environment – the central nursery space – is made up of containers, brightly painted and decorated with artwork to appeal to children.

Even trendy consumer labels have caught a whiff of the trend. FREITAG’s flagship store in Zurich is one example of an application of containers that fits in with the brand’s philosophy. Known for its unique messenger bags made from truck taupaulins, the Zurich store is a representative of FREITAG’s approach of using recycled elements in unique ways. Fasteners were used to hold the 17 containers together to retain their authentic, raw feel.

Travelling art projects have also given new relevance to the mobility of the container. Overlooking the blue bay of the Oslofjord, the owner of the GAD gallery by architects MMW Architects (of Norway) wanted a semi-temporary gallery that could move within days or weeks. Two of Shigeru Ban Architects’ large-scale container projects are movable museums: the Papertainer museum in Seoul, South Korea, and the Nomadic Museum, a movable museum for the exhibition Ashes and Snow, which has travelled to New York, California and Tokyo.

In an era of not just human mobility, but also that of objects, the container seems to have found its moment in history.