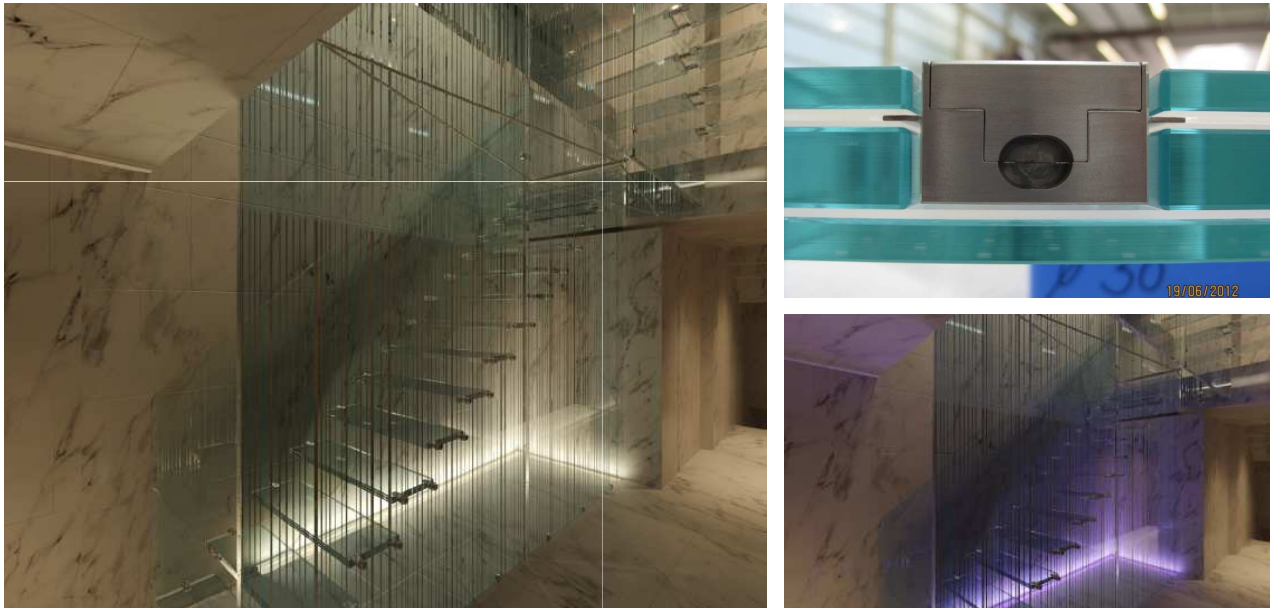


repulse bay stair

Hong Kong, China, housing development, project number 20018



Owner	Henderson Land Development
Architect	Carpenter/Lowings Architecture & Design Ltd.
Engineer	Eckersley O'Callaghan
Installation Period	11/2011 - 07/2012
Project Management	Ralf Scheurer

Scope of work

- Production and installation of the all-glass-stair
 - Glass outer strings and treads of three-ply laminated glass with anti-slip screen printing
 - Only three fittings are required for fixing each tread
 - Fittings are laminated into strings, therefore no drilled fixings
 - Large ipachrome-coating of the inner strings
 - Skylight for atmospheric lightning time of day and time of year

Description

Repulse Bay, an upmarket residential district, boasts one of the most beautiful and most popular beaches in Hong Kong. London-based architects Carpenter/Lowings Architecture & Design is responsible for modernising one of the coveted maisonettes with a rooftop terrace commanding a view over the bay. One true eye-catcher inside the apartment is an all-glass stair that, through an opening skylight, provides direct access to the terrace on the roof. This glass hatch also allows daylight to reach deep into the interior. In addition, LED lights, changing with time of day and time of year, illuminate the glass structure and create atmospheric lighting conditions on both floors.

According to the design brief of the planning team, the two flights of this stair should be virtually "invisible". The stair consists of glass outer strings and treads of three-ply laminated glass with anti-slip screen printing on the topmost ply of each tread. Instead of inner strings, two panes of glass, each the full height of the room, carry the loads. It was seele's expertise that enabled the visible construction elements to be reduced to a minimum – only three fittings are required for fixing each tread. Specially developed by seele, these fixing elements are among the smallest tread fittings currently in use for the structural glass elements of all-glass stairs. At the outer strings, each tread is attached via just one fitting laminated between the two inner panes of the three-ply glazing; the outer pane runs past. Two fittings per tread are sufficient on the inside edge of the stair. The design is further dematerialised by the ipachrome coating applied to the panes in irregular stripes; their high reflectance in conjunction with the changing LED lighting results in an iridescent effect.