



FRP constructions: Platform above railway

- Problem** Window-cleaning on a railway-building above railway wires.
 Danger of electrocution for cleaners in proximity of the wires.
 No possibility for frequent maintenance due to the train traffic.
 No possibility to fix a heavy construction due to the restricted area where fixation is possible.
 It is not possible to fix in the pre-stressed concrete beams.
- Solution** In order to deal with this electrocution and maintenance problems Fiber Reinforced Plastic beams and FRP gratings were used.
 This material does not conduct the electrical current and is maintenance-free.
 Their light weight helps to limit the amount of fixing points
- Materials** U 150/50/6 I 150/50/6 L50/50/5
 Handrail system containing: square box 60*60*4.5, tube 30*24 and ergonomic handrail
 Vikugrate gritted grating.
- Size** 11m x 1,2m and only 5 fixing brackets
- Year of construction** beginning of 2009.
- Benefit** FRP materials are the ideal solution for this electrical safety problem.
 Beside the electrical non-conductivity, there is the light weight, which limits the installation cost.
 The materials offer low maintenance costs since they are colored in mass.
 They do not need painting. It has no plastic deformation and is thermally stable.
 It is safe in use thanks to the grit surface.