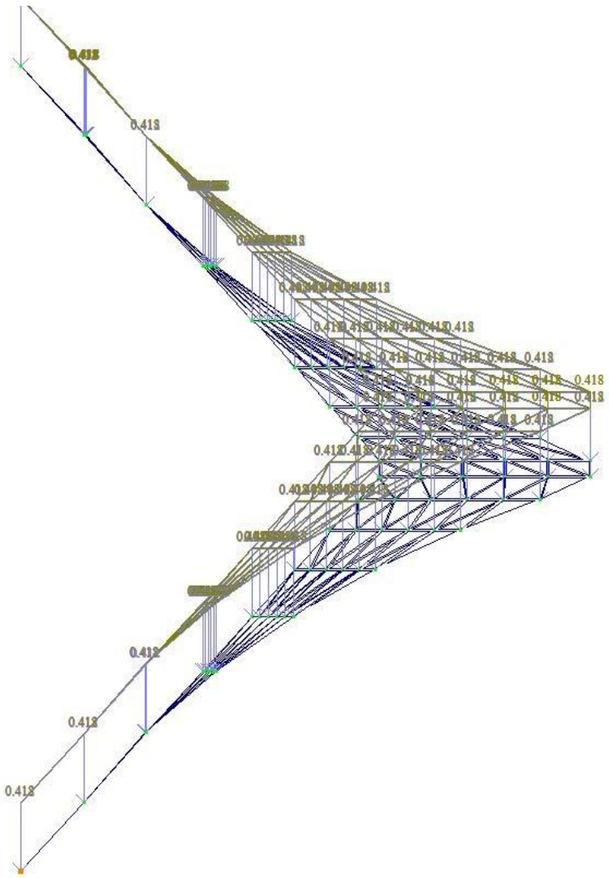
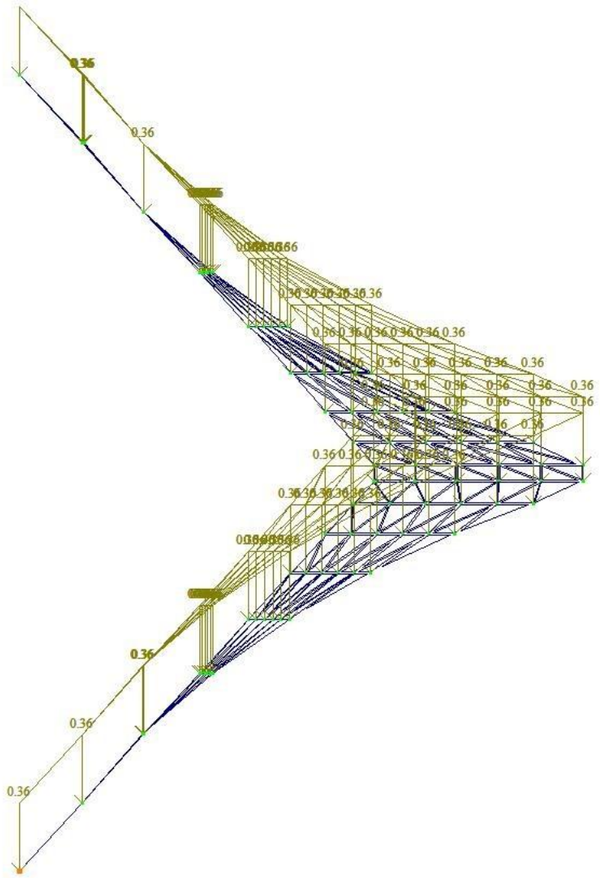
Collection of loads and load application schemes

Constant loads



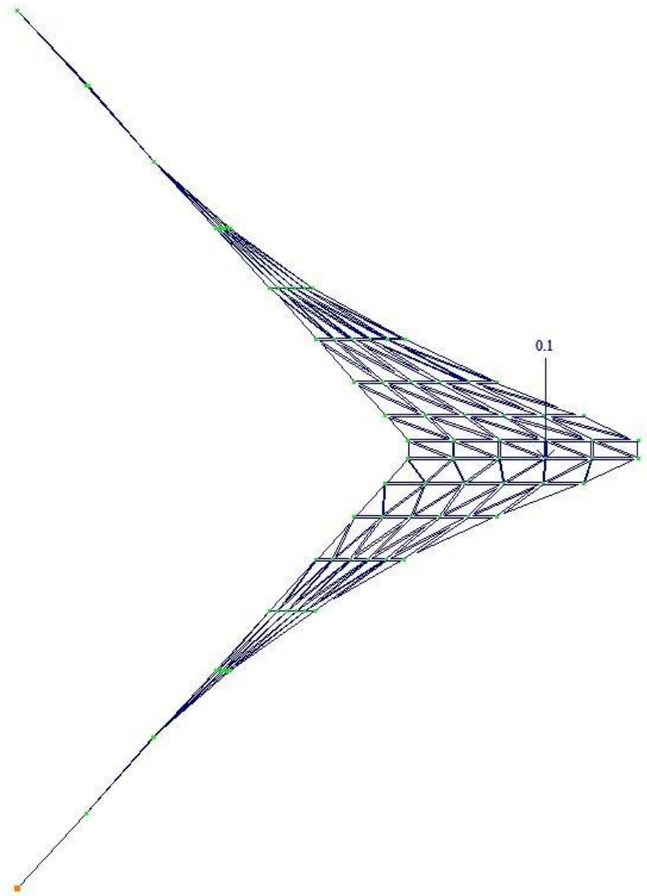
1. Own weight of a 150mm plate:
   0.15m*2.5t*1.1 (load factor) = 0.412t/m2
2. 2.1 Load from the triangular prism of the steps to the slab of the stairs: 0.1m*2.5t*1.1 (Load factor)= 0.275t/m2
   2.2 Loads from decorating the steps (we take the maximum Marble for steps and under-stairs, 50 mm):
   0.05*2.6*1.1=0.143t/m2
   Total: 0.275+0.143=0.418t/m2

Temporary loads



1. Temporary load on the stairs:
   0.3t/m2*1.2 (load factor) = 0.36t/m2

Short-term loads



1. Short-term load on the center of the staircase:
   0.1t
Deflection should not exceed 0.7 mm (calculation for wobble)

Load on a 160 mm thick floor slab:

1. Permanent:
   1.1 Own weight of the slab: 0.16m*2.5t*1.1 (load factor) = 0.44t/m2
   1.2 Cem.pis. screed and floor finish: 0.186t/m2*1.15=0.22t/m2
2. Temporary:
   2.1 Payload + suspended ceiling + engineering communications:
   (0.150+0.015+0.01)t/m2*1.17=0.21t/m2

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						Kiev region, Vyshhorod district, (Lebedivska silska rada) cottage town Riviera villas			
						Construction of concrete monolithic stairs	Stage	Sheet	Sheets
							P	06	15
Developed		Karpov A.Y.				Collection of loads and load application schemes	Stairs-A		
Verify		Tkach K.G.							