



Tallinna ühe prestiižikama 14-korruselise elu- ja ärihoone kahel alumisel maapealsel korrusel asuvad äripinnad, ülejäänud korrustel paikneb 92 eksklusiivset korterit. Hoonesse on kolm peamist sissepääsu, mis vastavad oma esinduslikkusele ümbritseva linnaruumi nõuetele.

Hoones on monoliitset raudbetoonist rajatud vaiaalus, keldri alusplaat, kaks maa-alust korrust ning maapealne kandekarkass. Maa-alused parklaskorruste seinad, postid ning laed on rajatud nn puhta monoliitse betoonpinnana, monoliitset raudbetoonist on rajatud ka parkla sissesõiduteed ning seda piirav pandussein. Hoone põhimuht on tõstetud üles viienda korruse tasandile nn Rävala läbimurde kohal olevate 16-meetrise komposiitpostidega, kus terastorud on

täisbetoneeritud alt pumpamise meetodil. Nii kõrgete postide puhul oli kriitilise tähtsusega tagada nende mitte läbinõtkumine ning vertikaalsus.

Kõik maapealsete korruste vahelaed on trossidega järelepinge laed koos järelepinge taladega Rävala pst kohal. Väljakutse oli tagada konsoolsete osade (kuni 4,5 m) mitte läbivajumine ja vajalik jäikus ning Rävala pst kohal oleva laia silde rajamine. Kuna tegemist on kortermajaga, kus tehti klientide poolt ehituse ajal hulgaliselt muudatusi, tuli lahendada lisa läbiviikude rajamine läbi valmis vahelagede, kus ei saanud läbi puurida trosse. Siin oli väga tähtis täpselt teostatud trosside paigaldus ning teostusdokumentatsioon, tagamaks trosside mitte läbipuurimise.

## KENTMANNI TN 6 ÄRI- JA ELUHOONE

Aadress	Kentmanni tn 6, Tallinn
Tellijä	AS Merko Ehitus
Tööde iseloom	uusehitus
Ehitusperiood	2012-2015
Muu	brutopind 19 759 m <sup>2</sup> , 92 korterit ja 10 äripinda



The commercial spaces are located on the two lowest above-ground levels of this 14-storey residential and commercial building, one of Tallinn's most prestigious. The upper levels house 92 exclusive apartments. The building has three main entrances, which meet the requirements of the surrounding neighbourhood in terms of prestige factor.

The building has a pile base built of monolithic reinforced concrete, a cellar sub-slab, two underground levels and an aboveground weight-bearing frame. The underground parking levels' walls, posts and ceilings were built as so-called clean monolithic concrete surfaces. The parking garage driveways and ramp wall delimiting the driveways are also of monolithic reinforced concrete. The building's main structure is raised using 16-metre composite posts, allowing the avenue R vala puiestee to run through the building. To accomplish this, steel pipes were filled with concrete by pumping it in from bottom up. With posts so high, it was critically important to ensure that they would be perfectly vertical.

The ceilings of all of the above-ground storeys are cable-post-tensioned along with post-tensioned beams above R vala puiestee. It was a challenge to ensure that the overhanging parts (up to 4-5 m) would not sag and that they would have the required rigidity, as was filling the wide span above the avenue. As this is an apartment building and a great many changes were made by the customers during construction, additional penetrations had to be made through the finished ceilings, where cables were not to be damaged by drilling. Here precise installation of cables and their documentation was of utmost importance in ensuring that the cables would not be damaged by drilling.



## COMMERCIAL AND RESIDENTIAL BUILDING AT KENTMANNI 6

Address	Kentmanni tn 6, Tallinn
Customer	AS Merko Ehitus
Construction type	new building
Construction period	2012-2015
Other	gross area 19,759 m <sup>2</sup> , 92 apartments and 10 commercial spaces

