

# CV

Name	Janne Hanka	
Year of birth	1984	
Education	Master of Science (Technology), Structural Engineering and Building Technology Aalto University (2012)	
	BEng. (Building Engineering) Helsinki Polytechnic Stadia (2008)	
Years of work experience	13	
Job title	Chief Specialist	
Key qualifications	Prestressed concrete structures: watertight tanks, transfer structures, yard decks	
	Strengthening design of existing structures	
	External inspector of structural designs Programming of design-aids software	
Language skills	Finnish, English, Swedish	

## Work Experience

2020–	RakenneStudio Oy / Structural Studio Ltd	Chief Specialist, Partner
2019–2020	Sweco Structures Ltd, Bridges	Department Manager
2015–2018	Sweco Structures Ltd, Prestressed concrete structures	Project Manager
2012–2015	Sweco Industry, Plant Engineering	Structural Engineer
2011–	Aalto University, Department of Structural Engineering	Lecturer, reinforced and post-tensioned concrete structures
2007–2012	Citec Engineering Oy Ab	Concrete Specialist
2006	Optiplan Oy	Trainee / Junior Engineer
2004-2006	NCC	Construction worker

## Qualifications

2020	FISE certification grade V+ (Difficult) External inspector of structural designs (until 04.06.2027)
2018	FISE certification grade PV (Exceptionally difficult) Designer of concrete structures (until 28.11.2025)

## Courses

2019	Sweco Academy - Manager training programme
2019	TEK Nuorten osajien Forum training 10.12.2018-24.04.2019
2016	Imperial College London: Post-tensioning Design and Construction
2016, 2018, 2019	BY/RIL Prestressed Concrete course, Lecturer
2016–2018	BY/RIL Site Manager for cast-in-situ concrete structures course, Lecturer (Composite structures)
2016	Sweco Academy - Project Manager training

## Memberships

Tekniikan Akateemiset TEK (Academic Engineers and Architects in Finland)
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## Publications

BY 69 Unbonded tendons in concrete structures (2016), Author of the calculation example
Master's Thesis: Validation of a standardized design method of loadbearing Siporex-slabs of autoclaved aerated concrete (2011)

## Awards

Concrete Structure of 2018, Amos Rex
RIL Award 2018, Amos Rex Art Museum
RIL Award, Fund of Fabian Ahvenainen and Oskari Vilamo: Master's Thesis: Validation of a standardized design method of loadbearing Siporex-slabs of autoclaved aerated concrete (2011)

## Notable projects

2019–2020	<b>Lippulaiva Bus terminal (Espoo)</b> Design of post-tensioned transfer slabs	Responsible Engineer Grade: Difficult
2016–2018	<b>Ainoa3 (Espoo)</b> Post-tensioned horizontal structures and transfer slabs (41000 m <sup>2</sup> )	Project Manager Grade: Exceptionally difficult
2016–2017	<b>Amos Anderson Art Museum (Helsinki)</b> Concrete domes (diameter 36 m and 25 m) supported with post-tensioned beams.	Structural Engineer, Project Manager Grade: Exceptionally difficult
2015–2016	<b>Metsä Fibre (Äänekoski)</b> Post-tensioned wastewater tanks (D=100 m, h=12 m and D=86 m, h=6 m)	Structural Engineer, Project Manager Grade: Exceptionally difficult
2013–2015	<b>Neste Jacobs Oy TL3 (Porvoo)</b> Design of concrete structures for the Turnaround 2015 stoppage. Strengthening design of tabletop structure with prestressed tendons. Analysis and strengthening design of old pipe bridges.	Structural Engineer, Project Manager Grade: Exceptionally difficult

## Projects

2020	<b>Rakennusteollisuus RT ry</b> Member of national commentary group RTT/SR 20/AK02 (Design of concrete)	Author of the comparison calculations for the Eurocode
2020	<b>Betoniyhdistys By ry, Betonitietosivusto</b> Content provider for Concrete Association of Finland – Post-tensioned structures	Content provider
2020	<b>Myllyparkki (Turku)</b> Inspection and report for horizontal post-tensioned structures (declaration of conformity)	External Inspector Grade: Difficult
2020	<b>Salmisaari (Helsinki)</b> Preliminary design of a concrete pontoon for a floating small residential building	Structural Engineer Grade: Difficult
2020	<b>Kalasadama (Helsinki)</b> Preliminary design of a concrete pontoon for a floating five storey residential building	Structural Engineer Grade: Exceptionally difficult
2020	<b>Mahtiparkki 626 (Espoo)</b> Internal inspection of a post-tensioned transfer structure	Inspector Grade: Difficult
2020	<b>As Oy Töölön kesäkatu (Helsinki)</b> External inspection of transfer beams (strengthening of existing structures)	External Inspector Grade: Difficult
2019	<b>Postipuun lastensuojelupalvelut (Espoo)</b> Post-tensioned transfer beams (spans 15 m and 14 m)	Responsible Engineer Grade: Difficult
2019	<b>Stora Enso OCO (Oulu)</b> Preliminary and construction phase design for post-tensioned concrete tanks (D=40 m, h=9 m and D=41 m, h=4 m)	Project Manager Grade: Exceptionally difficult
2019	<b>E18 Bridges</b> External inspector of structural designs	Inspector Grade: Difficult
2019	<b>Kuhansalontie Bridge (Joensuu)</b> External inspector of structural designs	Inspector Grade: Difficult
2019	<b>LETKE Bridge S6</b> External inspector of structural designs	Inspector Grade: Difficult
2019	<b>Eliel Saarisen tie 42 (Helsinki)</b> Post-tensioned yard deck (996 m <sup>2</sup> )	Responsible external inspector Grade: Difficult
2019–2020	<b>Lippulaiva Bussiterminaalilohko (Espoo)</b> Design of post-tensioned transfer slabs	Responsible Engineer Grade: Difficult
2019	<b>As Oy Kreivi, Herttua ja Markiisi (Kauniainen)</b> Post-tensioned beams and slabs (2090 m <sup>2</sup> )	Responsible Engineer Grade: Difficult
2019	<b>As Oy Portus (Helsinki)</b> Post-tensioned beams and slabs (2070x2=4170 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2019	<b>As Oy Harjus, Smoltti ja Klossi (Helsinki)</b> Post-tensioned beams and slabs (800 m <sup>2</sup> )	Project Manager Grade: Difficult
2019	<b>Telakkaranta (Helsinki)</b> Post-tensioned structures (2800x3=8400 m <sup>2</sup> )	External Inspector Grade: Difficult
2019	<b>Tesoma (Tampere)</b> Post-tensioned beams and slabs (2298 m <sup>2</sup> )	Project Manager Grade: Difficult

2018	<b>Santos Park korjaus (Helsinki)</b> Design of repair works for post-tensioned parking slab (200 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2018	<b>Topaasiparkki (Helsinki)</b> Post-tensioned beams and slabs (6500 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2018	<b>Tripla (Helsinki)</b> Deformation and bracing design of load transfer level for the new station building (4000 m <sup>2</sup> )	Structural Engineer Grade: Exceptionally difficult
2017–2019	<b>Hertsi Herttoniemi (Helsinki)</b> Post-tensioned horizontal structures and transfer slabs (10 900 m <sup>2</sup> )	Project Manager Grade: Exceptionally difficult
2016–2018	<b>Ainoa3 (Espoo)</b> Post-tensioned horizontal structures and transfer slabs (41 000 m <sup>2</sup> )	Project Manager Grade: Exceptionally difficult
2016–2020	<b>Raitinkartano (Espoo)</b> Post-tensioned horizontal structures and transfer slabs (12 500 m <sup>2</sup> )	Project Manager Grade: Exceptionally difficult
2018	<b>Neste Jacobs Oy Jätevedenkäsittely (Porvoo)</b> Post-tensioned concrete tanks	External Inspector Grade: Difficult
2017	<b>Korvatunturintie 8 (Espoo)</b> Post-tensioned beams and slabs	Structural Engineer Grade: Difficult
2017	<b>Pumppupuisto autohalli (Espoo)</b> Post-tensioned beams and slabs	Structural Engineer Grade: Difficult
2017	<b>Flamingo Wing (Vantaa)</b> Cast-in-situ transfer beams (1440 m <sup>2</sup> )	Project Manager Grade: Exceptionally difficult
2017	<b>Olympiastadion (Helsinki)</b> Post-tensioned slabs (2000 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2017	<b>Metsä Fibre (Äänekoski)</b> Post-tensioned wastewater tanks (D=80 m and h=8 m)	Project Manager Grade: Exceptionally difficult
2017	<b>Lahti Aqua Määdättämösäiliöt (Lahti)</b> Stress analysis, strengthening design and risk assessment for existing post-tensioned concrete tanks.	Structural Engineer Grade: Exceptionally difficult
2016	<b>Neste Jacobs Oy Jätevedenkäsittely (Porvoo)</b> Preliminary design for post-tensioned concrete tanks (2x10000 m <sup>3</sup> ja 2x3200 m <sup>3</sup> )	Project Manager Grade: Exceptionally difficult
2016	<b>Aviapolis (Vantaa)</b> Preliminary design for post-tensioned transfer slabs	Structural Engineer Grade: Exceptionally difficult
2016	<b>Marinkallio (Espoo)</b> Post-tensioned yard deck (2800 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2016	<b>Isosaarentien 2 (Helsinki)</b> Post-tensioned yard deck	Structural Engineer Grade: Difficult
2016–2017	<b>Amos Andersonin taidemuseo (Helsinki)</b> Concrete domes (diameter 36 m and 25 m) supported with post-tensioned beams.	Structural Engineer, Project Manager Grade: Exceptionally difficult
2015–2016	<b>Metsä Fibre (Äänekoski)</b> Post-tensioned wastewater tanks (D=100 m, h=12 m and D=86 m, h=6 m)	Structural Engineer, Project Manager Grade: Exceptionally difficult
2015	<b>Kehä I Keilaniemen tunneli (Espoo)</b> Preliminary design for a blast loaded concrete tunnel (L=220m)	Structural Engineer Grade: Exceptionally difficult

2015	<b>Villa Breda (Espoo)</b> Post-tensioned yard deck (875 m <sup>2</sup> )	Structural Engineer Grade: Difficult
2012–2016	<b>Neste Jacobs Oy (Porvoo)</b> Lead concrete designer in various concrete structures to the oil refinery area. Predesign and project supervision of water treatment plant. Designer in new and renovation of old pipe bridge foundations Project manager in cable trench (600m) design project.	Project Manager Grade: Difficult
2013–2015	<b>Neste Jacobs Oy TL3 (Porvoo)</b> Design of concrete structures for the Turnaround 2015 stoppage. Strengthening design of tabletop structure with prestressed tendons. Analysis and strengthening design of old pipe bridges.	Structural Engineer, Project Manager Grade: Exceptionally difficult
2013–2015	<b>Hakan Peat Power Plant (Rwanda)</b> Owners Engineer consultant work in Structural and Civil Engineering. Preparing of bidding invitation documents for EPC and Boiler candidates. Comparing technical and cost differences between the EPC candidates. Negotiations with EPC candidates.	Project Manager Grade: Difficult
2013, 2014	<b>Aaba pelikentät (Helsinki)</b> Design of screw-piled concrete foundations for air domes to Pajamäki (66m x 46m) and Töölö P7 (91m x 61m).	Structural Engineer Grade: Difficult
2012–2014	<b>Neste Jacobs Oy (Porvoo)</b> Sewage tank renovation. Concrete Lead Engineer. Design of new concrete sewage tank (340m <sup>3</sup> ). Renovation and expansion of old underground concrete sewage tanks.	Structural Engineer Grade: Exceptionally difficult
2013	<b>ST1 (Kajaani)</b> Preliminary design for steel-, concrete- and envelope structures for cost estimation of new Ethanol plant. Utilization of building information modeling in de-sign, modeling and quantification using Tekla Structures.	Structural Engineer Grade: Difficult
2013	<b>Talvivaara (Kajaani)</b> Expansion of a gas cleaning building (809 m <sup>2</sup> ). Responsible engineer of steel- and concrete structures. Design of foundations with Tekla Structures. Analysis and design of steel structures. (809 m <sup>2</sup> )	Responsible Engineer Grade: Difficult
2012–2013	<b>Keravan Lämpövoima Oy (Kerava)</b> Expansion of a fuel house: Laboratory (420m <sup>3</sup> ) and hall (2000m <sup>3</sup> ) buildings. Steel- and concrete structures lead engineer. Design of foundations and precast elements with Tekla Structures. Analysis and design of steel structures.	Responsible Engineer Grade: Difficult
2012	<b>Oy AGA AB (Riihimäki)</b> Medicinal Gas Filling. Lead designer for concrete and steel structures for an expansion of an industrial facility.	Structural Engineer Grade: Difficult

2012, 2013	<b>ST1 (Hamina, Vantaa, Göteborg, Kajaani)</b> Structural engineering for petrochemical plant sites. Analysis of an old conveyor bridge. Predesign of steel structures for a distillation colon (h=30m). Design of concrete structures for an expansion of handling facility. Renovation design of large spanning (span=25m) pipe bridge. Renovation design of steel crane beams.	Structural Engineer Grade: Difficult
2011–2015	<b>H+H Finland Oy</b> Developer of calculation programs for slab and beam elements made of autoclaved aerated concrete.	Structural Engineer Grade: Difficult
2011	<b>IKANO (Kuopio)</b> Shopping cen. Pre-design of bracing and precast floors for a large (49000m <sup>2</sup> ) concrete-steel composite building frame.	Structural Engineer Grade: Difficult
2010-2011	<b>Wärtsilä/Fortum (Loviisa)</b> Fortum Power and Heat, Emergency power plant. Lead Engineer of concrete design.	Structural Engineer Grade: Difficult
2010	<b>Neste Oil, Teboil ja St1 (Helsinki)</b> Kyläsaari Petrol stations. Lead engineer in a petrol station project. Design of shelters and tank foundations.	Structural Engineer Grade: Difficult
2010	<b>Wärtsilä, several projects</b> Design of concrete foundations for diesel- and gas powerplants to Europe, Africa, and South America.	Structural Engineer Grade: Difficult
2008-2011	<b>SKOL Calculation sheet project according to Eurocodes</b> Developer of a calculation tool for biaxially bended concrete columns according to EC2.	
2008-2009	<b>Viinikkala Logistics Center (Vantaa)</b> Design of fibre-reinforced concrete floors. Design of complementary concrete and steel structures.	Structural Engineer Grade: Difficult