

Recommendations for high-quality production of fair-faced concrete surfaces			Involved (x...Proposal)								done
Subject	Task	Instruction / Tip	Builder, Architect	Engineering office	Formwork supplier	Concrete supplier	Site manager	Site foreman	Foreman	Formwork experts / construction worker	
Fair-faced concrete TEAM	Requirements of the fair-faced concrete construction should be known by all involved. Working out: "Who is responsible for what". It is a good idea to assemble relevant subcontractor and supplier in the fair-faced concrete TEAM.	Tip: Basis is the specifications and the contract documents of technical standards, guidelines and recommendations. E.g. DBV Code of Practice "Fair-faced concrete, Fair-Faced Concrete Guideline ÖVBB	X	X	X	X	X	X	X	X	X
	Training for all involved on the fair-faced concrete site. Deciding on the working process, responsibility and measures of quality protection	Tip: Doka fair-faced concrete seminar					X	X	X	X	
Structuring and texture of concrete surface	Choosing of formwork-system and plywood.	Tip: Brochure "Fair-faced concrete with Doka"	X	X	X	X	X				
	Location of construction joints and joint formation	Tip: Doka Services execution drawings	X	X	X	X	X				
Pattern plan of formwork	Joints between formwork elements, Joints between form-ply sheets, define form-tie pattern	Fair-faced concrete note on all drawings	X	X			X	X			
	Inclusion of concreting and vibrator gaps		X	X			X	X			
	Inclusion of enough concrete cover		X	X							
Definition of working processes	Principle: "Everything the same way"										
	- Team - Composition of concrete, position of concrete and compression of concrete - Plywood: Product, age and prior use - Release agent and applying release agent - Weather: Temperature, rain (means of protection and include reserves in the construction time) - Time of striking the formwork - After treatment - Protection of fair-faced concrete surfaces		X	X	X	X	X	X	X	X	X
Design details of formwork	Check the state of plywood (plywood category)	Tip: Doka practical information "Forming fair-faced concrete"						X	X	X	
	Fixing the plywood with nails and screws.	Observe swelling characteristics of wood boards (possibility to let the nail head project) Using of galvanised nails and screws			X			X	X	X	
	Seal the cut edge of the plywood. Avoid staining the plywood surface with the edge lacquer				X			X	X	X	
	Seal joints between sheets possibly with sealant. After that, avoid leaking sealant onto the plywood surfaces.	Avoid filling of plywood			X			X	X	X	
	Remove marks on the fair-faced concrete surfaces				X			X	X	X	
	Execution of form-tie points, closing of tie-holes and definition of edges	Tip: Doka accessories for fair-faced concrete	X				X	X			
Pre-treatment of formwork	Pretreat absorbent formwork before beginning with the first concreting section by application of cement slurry and later sweep off.							X	X	X	
Storage	Protection of formwork against weather and site traffic	Store wall formwork vertically. Use intermediate layer of textile for stock storage.						X	X	X	
Open formwork	Define if the holding side or the closing side of formwork is on the side of fair-faced concrete.	Tip: Advantage and disadvantage: Have a look at Doka practical information "Forming fair-faced concrete"	X				X	X	X		
	Sealing of construction-joints and stop end formwork with sealing tapes.	Tip: Doka sealing line D3cm, Doka sealing tape						X	X	X	
	Pull tight the element joints. Watch out for sharp edges.	Tip: Executive function panel connector FF20/50 Z						X	X	X	
	At infill zones use the same type of plywood as the formwork. Before fixing the anchor envelope tubes check the length of them.	Tip: Doka fair-faced concrete-distance pieces						X	X	X	
	Use anchoring cones that are suitable for fair-faced concrete.	Tip: Doka fair-faced concrete-universal cone 22mm						X	X	X	
Release agent	Agree the release agent on sample surfaces on the formwork and on the concrete. Specifically at slightly and non absorbent formwork types, the choice of the release agent has a wide influence on the porosity of concrete.	Tip: The construction of concrete surfaces without pore formation and colour homogenous will be supported by Doka-OptX.	X				X	X	X	X	
	Take care and apply the right quantity of release agent. Follow the manufacturers' instructions.	Usually: The less the better!						X	X	X	
Protection of formwork who is ready for pouring	With long delays between uses cover the formwork.	Tip: Doka Panels-protection tissue-foil						X	X	X	
Reinforcement and spacer	Define, after testing, the type and position of the spacers.							X	X		X
	Protect the connection reinforcement against rust.	Use galvanised reinforcement or apply cement slurry on the connection reinforcement.	X	X				X	X	X	
	Special care at the installation of reinforcement. Protect the plywood against damage and soiling.	Only use galvanised tying wire									X
	Stand on the formwork face as little as possible	Tool or material shouldn't be directly placed down on the formwork. Use protection covers on safety shoes. Blow out of the formwork before concreting						X	X	X	X

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Concrete choosing and processing of concrete	Choosing the concrete mix. The concrete mix has an critical influence on the quality of concrete surfaces.	Tip: Information about the concrete composition for fair-faced concrete can be found in the DBV leaflet fair-faced concrete or the guideline fair-faced concrete ÖVBB	X	X		X	X	X			
	Adapt concrete mix to suit weather conditions	The production of high class fair-faced concrete at ambient temperatures <10° will only be partially successful.	X	X		X	X	X			
	The processing of the concrete has an essential influence on the quality of concrete surfaces	Tip: Basics for the right concrete placing ERMCO/BTB brochure "Right pouring - How it works"						X	X	X	
		<ul style="list-style-type: none"> - Height of fall of concrete in the formwork = 0cm! - Don't pour the concrete against the formwork - Use vibrators with rubber caps - Don't let the vibrators come into contact with the reinforcement or plywood - Interval between placement of formwork and placing of concrete should be as short as possible 						X	X	X	
Stripping	Stripping the fair-faced concrete surfaces as early as possible (after reaching the minimum of the concrete compressive strength for the stripping process)	You will find information about the minimum concrete compressive strength in standards and guidelines. By raising the concrete strength class you can achieve earlier stripping		X			X	X	X	X	
	undertake stripping process completely and quickly	Remove the formwork immediately after loosening the anchors.						X	X	X	
After treatment	Immediately after stripping begin with the after treatment. Protection of concrete surfaces with a not shrink foil cover. It should not create a draught between the concrete surfaces and the cover.	Tip: Compare DIN 1045-2, ÖNORM B4710-1	X	X			X	X	X		
Cleaning of formwork	Clean the formwork immediately after stripping with scraper and/or high-pressure washer							X	X	X	
Protection of finished components	Control the drainage of rainwater							X	X	X	
	Protection of finished fair-faced concrete surfaces during the construction phase against soiling, damage etc. (foil, labelling, edge protection)							X	X	X	
Assessment of fair-faced concrete surfaces	In the assessment, consider the overall impression before the localised impressions. Fix the criteria for the assessment before execution.	The assessment of fair-faced concrete surfaces shouldn't be take place immediately after stripping because the appearance of the young concrete surface changes.	X				X	X			

The practical information "Forming fair-faced concrete" can be obtained from info@doka.com.