

# **“As-Built Documentation”: Birth Certificate Document**

**for**

[Insert name of the construction]

**Date: xx-xx-xx**

**Prepared by: xxx**

**Approved by: xxx**

## Contents

General information.....	2
Mix design, fresh concrete properties and casting.....	2
Materials and construction details .....	3
Execution errors and critical construction details .....	3
Execution error X .....	3
Execution error Y.....	3
Results from microscopy.....	4
Results from lab tests.....	5
Inspection and maintenance strategy .....	5
Inspection program.....	5
Appendix 1: Construction drawings.....	6
Appendix 2: Description of drilled concrete cores.....	7

General information	
---------------------	--

<b>Name of construction</b>	
<b>Client/owner</b>	
<b>Contractor</b>	
<b>Year of construction</b>	
<b>Geographical location</b>	
<b>Exposure class</b>	
<b>Environmental class</b>	
<b>Specified service life</b>	
<b>Brief description of the construction</b>	[Here a brief description of the construction is given including specified construction type (e.g. bridge, tunnel, etc.). If available, construction drawings/pictures are enclosed in Appendix 1.]

Mix design, fresh concrete properties and casting				
---------------------------------------------------	--	--	--	--

<b>Construction part</b>				
<b>Date of casting</b>				
<b>Concrete recipe</b>			<b>Weight [kg/m<sup>3</sup>]</b>	<b>Volume [m<sup>3</sup>/m<sup>3</sup>]</b>
<b>Equivalent water/cement ratio*</b>	<b>Air content [%] (target)</b>	<b>Density [kg/m<sup>3</sup>] (target)</b>	<b>Slump [mm] (target)</b>	<b>Slump flow [mm]</b>
<b>Other details</b>				

<b>Construction part</b>				
<b>Date of casting</b>				
<b>Concrete recipe</b>		<b>Weight [kg/m<sup>3</sup>]</b>	<b>Volume [m<sup>3</sup>/m<sup>3</sup>]</b>	
<b>Equivalent water/cement ratio*</b>	<b>Air content [%] (target)</b>	<b>Density [kg/m<sup>3</sup>] (target)</b>	<b>Slump [mm] (target)</b>	<b>Slump flow [mm]</b>
<b>Other details</b>				

### Materials and construction details

<b>Reinforcement type</b>	
<b>Spacer type</b>	
<b>Cover thickness [mm]</b>	

### Execution errors and critical construction details

This section includes information regarding deviations and various execution errors that were encountered during the construction phase, which may be critical for the performance of the specified service life of the construction. Also, any repairs carried out during the construction phase are mentioned here. The documentation is based on observations made during the construction phase, as well as observations from an inspection...

**[Insert name of execution error X]**

Description + picture documentation of execution error X.

**[Insert name of execution error Y]**

Description + picture documentation of execution error Y.

<b>Results from microscopy</b>	
<b>Sample ID</b>	[Information about sample names, thin section number, etc. is given here]
<b>Age</b>	[The age of the investigated material is specified here]
<b>Observations</b>	[Relevant observations from investigations by microscopy is given here, i.e. essential results from e.g. optical microscopy or analysis by Scanning Electron Microscopy]
<p>[Relevant picture from the microscopy is inserted here]</p> <p style="text-align: center;">[Figure caption]</p>	<p>[Relevant picture from the microscopy is inserted here]</p> <p style="text-align: center;">[Figure caption]</p>
<p>[Relevant picture from the microscopy is inserted here]</p> <p style="text-align: center;">[Figure caption]</p>	<p>[Relevant picture from the microscopy is inserted here]</p> <p style="text-align: center;">[Figure caption]</p>

## Results from lab tests

<b>Test method</b>	<b>Results</b>
[Insert name of test method, e.g. NT Build 203: Compressive strength]	[Test results are given here in the form of measured values, graphs, etc.]
[Insert name of test method, e.g. NT Build 443: Chloride ingress, accelerated]	[Test results are given here in the form of measured values, graphs, etc.]
[Insert name of test method, e.g. NT Build 492: Chloride migration coefficient]	[Test results are given here in the form of measured values, graphs, etc.]
[Insert name of test method, e.g. SS137244: Frost resistance]	[Test results are given here in the form of measured values, graphs, etc.]
[Insert name of test method, e.g. NT Build 388: Heat development]	[Test results are given here in the form of measured values, graphs, etc.]

## Inspection and maintenance strategy

**Areas requiring special attention**

Beside the periodic general inspections, follow-up inspection should be carried out where special attention is paid to the following areas:

[Name of focus area X is inserted here, e.g. certain observed cracks]  
Brief description of focus area X is given here.

[Name of focus area Y is inserted here, e.g. honeycombs]  
Brief description of focus area Y is given here.

**Inspection program**

Suggestions for inspections program are specified here.

## **Appendix 1: Construction drawings**

[Construction drawings are inserted here]

## **Appendix 2: Description of drilled concrete cores**

[Description and drawings are inserted here]