

Materials Sampling Guide

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Item or Group	Minimum Material Certificate, Test and Inspection Requirements					Note No	Page No
	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information		
SECTION: 20 – Bridge Materials							
1) Aluminum Filled Resilient Sealing Compound	Yes – One pint or three-pound sample from each lot or batch unless brand from Approved Products List used.	Yes	No	No	---	---	
2) Asphalt Plank	Yes – Three planks from each 1000 planks of each thickness.	No	No	No	---	---	
3) Lock-Pin and Collar Fasteners (High Strength Steel)	Yes – One lock-pin and collar fastener of each size and length from each 800 or fraction thereof, unless shipped from tested and approved stock.	No	No	Yes	13	10	
4) Bridge Deck Drainage System	No	No	No	Yes	---	---	
5) Caulking and Sealing Compounds	No	Yes	No	No	---	---	
6) Deck Joint Seal	No – Unless requested	No	Yes	Yes	---	---	
7) Form Insulation	No - Unless requested	No	Yes	No	---	---	
8) Galvanized Sheet Metal	Yes – One sample approximately 30-40 square inches from each lot or batch.	No	No	No	1	1	
9) Galvanized Steel Wire Strand	Yes – One sample six feet long from each lot of 5000 feet or less and two samples from lots of 5000 to 30,000 feet.	No	No	No	1	1	
10) Lead Sheet	Yes – One sample approximately 30-40 square inches from each lot or batch.	No	No	No	1	1	
11) Kraft Paper	Yes – One 36 inch sample full width of roll or six square feet from each lot or batch.	No	No	No	---	---	

Item or Group	Minimum Material Certificate, Test and Inspection Requirements					Note No	Page No
	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information		
SECTION: 20 – Bridge Materials (continued)							
12) Bolts, Nuts, Washers							
A) Anchor							
a) High Tensile	Unless shipped from tested and approved stock, the contractor has the option to either provide certified mill test reports on material used, or submit one sample bolt of each size to the Lincoln Lab for destructive testing. The sample must be taken by the Project Manager and must be accompanied by a manufacturer's certificate of compliance. Materials shall not be approved for incorporation into the work until certified mill tests or sample test results and certificates of compliance are in hand.	No	---	---	13	10	
b) Low Carbon (common)	No – Project Manager to measure length and diameter. If galvanized, check in the field by use of magnetic instrument for both bolts and nuts. Report results to the Materials and Research Division on Form TL-5166.	No	No	Yes	13	10	
c) Swedge	No – Project Manager to measure length and diameter. If galvanized, check in the field by use of magnetic instrument for both bolts and nuts. Report results to the Materials and Research Division on Form TL-5166.	No	No	Yes	13	10	
B) Structural Fasteners for Steel Bridges a) High Tensile (Regular & Weather Resisting Types)	* Yes – 150 and less 1 Bolt, Nut & Washer 151 to 280 2 Bolts, Nuts & Washers 281 to 500 3 Bolts, Nuts & Washers 501 to 1,200 5 Bolts, Nuts & Washers 1,201 to 3,200 8 Bolts, Nuts & Washers 3,201 to 10,000 13 Bolts, Nuts & Washers 10,000 and over 20 Bolts, Nuts & Washers In addition to the samples required above, two bolts of each length and diameter (2 ¼ inches and longer) are required. A nut and washer shall be provided with each bolt. *These samples are for destructive testing and will not be returned.	No	Yes	No	13	10	
b) Low Carbon (common)	No	No	No	Yes	13	10	

Item or Group	Minimum Material Certificate, Test and Inspection Requirements					
	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information	
SECTION: 20 – Bridge Materials (continued)					Note No	Page No
13) Elastomeric Bearings	No - If these bearings have not been inspected by the Bridge Division, Steel Fabrication Inspection Unit, call John Luedeke at (402)479-4763 and they will be inspected on the jobsite prior to installation.	No	Yes	No	---	---
A) Elastomeric Bearing Pads - Neoprene or Neoprene with Steel Shim	No – Random sampling may be performed by the Bridge Division, Steel Fabrication Unit.	No	Yes	No	---	---
B) Bearing Pads - Cotton Duck	No – Random sampling may be performed by the Bridge Division, Steel Fabrication Unit.	No	Yes	No	---	---
14) Fixed and Expansion Bearings, TFE Type	No - If these bearings have not been inspected by the Bridge Division, Steel Fabrication Inspection Unit, call John Luedeke at (402)479-4763 and they will be inspected on the jobsite prior to installation.	No	Yes	Yes	---	---
15) Confined Elastomeric Bearings (Pot Bearings)	No - If these bearings have not been inspected by the Materials and Research Division, call the Physical Tests Section at (402)479-3849 and they will be inspected on the jobsite prior to installation.	No	Yes	Yes	---	---
16) Strip Seal	No	No	Yes	Yes	---	---
17) Epoxy Compounds	No	Yes	No	Yes	20	12
18) Grouting Material						
A) Non-Shrink Grout	No	Yes	No	No	---	---
B) Epoxy Type	No	Yes	No	Yes	20	12
19) Joint Sealing Fillers						
A) Cold Poured Type	Yes – One five pound minimum sample from each lot, unless shipped from tested and approved stock.	No	No	No	---	---
B) Hot Poured Type	Yes – One five pound minimum sample from each lot, unless shipped from tested and approved stock.	No	No	No	---	---
20) Paint	No	Yes	No	No	1	1
21) Preformed Joint Filler	No	Yes	No	Yes	---	---

Item or Group	Minimum Material Certificate, Test and Inspection Requirements					
	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information	
SECTION: 20 – Bridge Materials (continued)					Note No	Page No
22) Pressure Relief Joint Filler, Preformed Flexible Polyurethane	No	Yes	No	Yes	---	---
23) Waterstop	Yes – One sample six inches in length unless shipped from tested and approved stock.	No	No	No	---	---
24) Wood Piling	No – Unless requested by the Materials and Research Division.	No	See Note	See Note	26	14
25) Wood Preservatives	Yes – One quart sample from each lot or batch	No	No	No	---	---
26) Zinc (Sheet)	Yes – Approximately 30-40 square inches from each lot or batch.	No	No	No	---	---
27) Reinforcement Bars (Including Dowel Bars)	Yes – Two samples six feet long from every bar designation and heat number unless shipped from tested and approved stock.	No	Yes	No	9	7
28) Steel A) Piling, Sheet Piling, Shells for Cast In Place Piling and Crossbracing for Piling B) Structural	No	No	Yes	No	15	10
a) Substructure	No	No	No	Yes	16	11
b) Superstructure	No	No	Yes	No	16	11
29) Precast and Prestressed Concrete Units	No	No	No	No	14	10
30) Prestressed Steel Wire Strand	Yes – One sample 12 feet long from each reel unless sampled at the manufacturer's plant by the testing agency of another state.	No	No	No	---	---
31) Structural Steel for Concrete Girder Bridges	No – Project Manager will check the structural steel for compliance.	No	No	Yes	---	---

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	Sample Required (Tests to be made at Lincoln laboratory)	Approved Products Lists	Manufacturer Certified Tests Required	Manufacturer Certification of Compliance Required	Location of Additional Information	
SECTION: 20 – Bridge Materials (continued)					Note No	Page No
32) Structural Fasteners for Concrete Girder Bridges a) High Tensile (Regular & Weather Resisting Types)	* Yes – 150 and less 151 to 280 281 to 500 501 to 1,200 1,201 to 3,200 3,201 to 10,000 10,000 and over In addition to the samples required above, two bolts of each length and diameter (2 ¼ inches and longer) are required. A nut and washer shall be provided with each bolt. *These samples are for destructive testing and will not be returned.	1 Bolt, Nut & Washer 2 Bolts, Nuts & Washers 3 Bolts, Nuts & Washers 5 Bolts, Nuts & Washers 8 Bolts, Nuts & Washers 13 Bolts, Nuts & Washers 20 Bolts, Nuts & Washers	No	No	Yes	13 10
b) Low Carbon (common)	No		No	No	Yes	13 10