

STRUCTURE MANAGEMENT SYSTEM (SMS)

APPENDIX L – Coding of Load Rating

How to Code Load Rating of a New Bridge with No Load Rating Analysis

Item#	Description	Code	Notes
63	Operating Method of Rating	5	No rating analysis performed
64	Operating Rating	45.000	Code in tons when #63 = 5
65	Inventory Method of Rating	5	No rating analysis performed; same as #63
66	Inventory Rating	36.000	Code in tons when #65 = 5
700	Operating Rating Load	3	HL93 Loading; same as #702
702	Inventory Rating Load	3	HL93 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	0	No calculations were done for load rating
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

How to Code Load Rating of a Bridge Exempt from Load Rating per ODOT BDM Section 900 (designed by LRFD Method)

Item#	Description	Code	Notes
63	Operating Method of Rating	F	Assigned ratings based on LRFR
64	Operating Rating	1.250	RF=1.250
65	Inventory Method of Rating	F	Assigned ratings based on LRFR; same as #63
66	Inventory Rating	1.000	RF=1.000
700	Operating Rating Load	2	HL93 Loading; same as #702
702	Inventory Rating Load	2	HL93 Loading; same as #700
704	Load Rating Date	9/9/2016	Do not put future date or prior to date-built
708	Software of Rating Analysis	7	Combination
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

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How to Code Load Rating of a Bridge Exempt from Load Rating per ODOT BDM Section 900 (designed by LFD Method)

Item#	Description	Code	Notes
63	Operating Method of Rating	D	Assigned ratings based on LFR
64	Operating Rating	1.250	RF=1.250
65	Inventory Method of Rating	D	Assigned ratings based on LFR; same as #63
66	Inventory Rating	1.000	RF=1.000
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	7	Combination
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

How to Code Load Rating of a Bridge under More Than 6.5 Feet (~2 meters) Of Fill

Item#	Description	Code	Notes
63	Operating Method of Rating	D	Assigned rating based on LFR
64	Operating Rating	3.000	Maximum value of RF to be coded is 3.000
65	Inventory Method of Rating	D	Assigned rating based on LFR; same as #63
66	Inventory Rating	3.000	Maximum value of RF to be coded is 3.000
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	7	Combination
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

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How to Code Load Rating of a Bridge with Assigned Load Rating {For Culverts Designed Using ASTM C1577 (LRFD), C1433 (LFD), C789 (LFD) & C850 (LFD)}

Rating Load: HS20

Item#	Description	Code	Notes
63	Operating Method of Rating	D	Assigned ratings based on LFR
64	Operating Rating	1.250	RF=1.250
65	Inventory Method of Rating	D	Assigned ratings based on LFR; same as #63
66	Inventory Rating	1.000	RF=1.000
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	7	Combination
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

How to Code Load Rating of a Bridge with Assigned Load Rating {For Culverts Designed Using ASTM C1577 (LRFD), C1433 (LFD), C789 (LFD) & C850 (LFD)}

Rating Load: HL93

Item#	Description	Code	Notes
63	Operating Method of Rating	F	Assigned ratings based on LRFR
64	Operating Rating	1.250	RF=1.250
65	Inventory Method of Rating	F	Assigned ratings based on LRFR; same as #63
66	Inventory Rating	1.000	RF=1.000
700	Operating Rating Load	3	HL93 Loading; same as #702
702	Inventory Rating Load	3	HL93 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	7	Combination
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	150	Assuming 150% for a new structure

STRUCTURE MANAGEMENT SYSTEM (SMS)

How to Code Load Rating of a Bridge When No Plans or Information are available for Load Rating (Also known as Good-5 Bridge)

Item#	Description	Code	Notes
63	Operating Method of Rating	0	Field evaluation and documented
64	Operating Rating	45.000	Code in tons when #63 = 0
65	Inventory Method of Rating	0	Field evaluation and documented; same as #63
66	Inventory Rating	36.000	Code in tons when #65 = 0
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
708	Software of Rating Analysis	0	No calculations were done for load rating (Default)
709	Rating Source	0	No Plan & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	100	100% Rated based on the Engineering Judgment

How to Code Load Rating of a Bridge that is posted based on field conditions

Item#	Description	Code	Notes
63	Operating Method of Rating	0	Field evaluation and documented
64	Operating Rating	20.000	Code in tons when #63 = 0
65	Inventory Method of Rating	0	Field evaluation and documented; same as #63
66	Inventory Rating	15.000	Code in tons when #65 = 0
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	Y	Posting needed based on rating
734	Ohio Percent of Legal Loads	90	90% of Ohio Legal

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How to Code Load Rating of a Bridge That Is Rated 100% Legal or Above but the Engineer Wants to Post It

Item#	Description	Code	Notes
63	Operating Method of Rating	0	Field evaluation and documented
64	Operating Rating	25.000	Code in tons when #63 = 0
65	Inventory Method of Rating	0	Field evaluation and documented; same as #63
66	Inventory Rating	18.000	Code in tons when #65 = 0
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	90	If the Engineer wants to post it at, say 90%

How to Code Load Rating of a Bridge That Is Rated Below 100% Legal But the Engineer Does not Want to Post It

Item#	Description	Code	Notes
63	Operating Method of Rating	0	Field evaluation and documented
64	Operating Rating	36.000	Code in tons when #63 = 0
65	Inventory Method of Rating	0	Field evaluation and documented; same as #63
66	Inventory Rating	27.000	Code in tons when #65 = 0
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; ;same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	Y	Posting needed based on rating
734	Ohio Percent of Legal Loads	100	100% of Ohio Legal

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How to Code Load Rating of a Bridge based on load testing

Item#	Description	Code	Notes
63	Operating Method of Rating	4	Load testing
64	Operating Rating	30.000	Code in tons when #63 = 4
65	Inventory Method of Rating	4	Load testing; same as #63
66	Inventory Rating	20.000	Code in tons when #65 = 4
700	Operating Rating Load	2	HS20 Loading; same as #702
702	Inventory Rating Load	2	HS20 Loading; ;same as #700
704	Load Rating Date	9/9/2013	Do not put future date or prior to date-built
709	Rating Source	1	Plans & Information available for load rating
733	Posting Required by Rating	N	No posting based on load rating
734	Ohio Percent of Legal Loads	100	100% of Ohio Legal