

### INTENDED USE

Strong-post W-beam guardrails should be used in locations where a maximum dynamic deflection of 36 inches [900 mm] or less is acceptable. W-beam guardrails should be anchored and terminated using a suitable end treatment such as the SEW03a-b, SEW04a-b (BCT) or SEW05 (MELT) terminals. SGR-04a (steel posts) with steel blockouts is a test level 2 barrier; SGR-04a with non-steel (wood or approved plastic) blockouts is a test level 3 barrier. SGR-04b (wood posts) with wood, steel or plastic blockouts is also a test level 3 barrier.

### COMPONENTS

Unit length = 150 inches [3810 mm]

Designator	Component	System	Number
FBB01	Splice bolts and nuts	a-b	8
FBB02	Guardrail-post bolts and nuts	a	2
FBB04	Guardrail-post bolts and nuts	b	2
FBX16a	Post blockout bolt (1.5 inches [40 mm]) and nut	a	4
FWC16a	Round washer	b	2
PDB01	Timber post blockout	b	2
PDE02	Timber post	b	2
or PDE13	Timber post	b	2
PWB01	Steel post blockout	a	2
PWE01	Steel post	a	2
or PWE02	Steel post	a	2
RWB01a	W-beam backup plate	a	1
RWM02a	W-beam rail	a-b	1

### APPROVALS

FHWA Acceptance Letter [B-64](#), 2/14/00.

### REFERENCES

M.E. Bronstad, J.E. Michie and J.D. Mayer, Jr., *Performance of Longitudinal Traffic Barriers*, National Cooperative Highway Research Program Report Number 289, Transportation Research Board, June, 1987.

C.E. Buth, W.L. Campise, L.I. Griffin, M.L. Love, and D.L. Sicking, *Performance Limits of Longitudinal Barriers*, Federal Highway Administration, Report No. FHWA-RD-86-153 (vol. 1), Washington, D.C., May 1986.

R.L. Stoughton, R.L. Stoker, E.F. Nordlin, *Dynamic Tests of Metal Beam Guardrail*, Transportation Research Record, Transportation Research Board, Washington, D.C., 1975.

## STRONG-POST W-BEAM GUARDRAIL

# SGR04a-b

SHEET NO.

DATE

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11/10/04

**CONTACT INFORMATION**  
Federal Highway Administration  
Office of Safety  
400 Seventh Street, SW  
Washington, DC 20590  
202-366-2288



**STRONG-POST W-BEAM GUARDRAIL**

**SGR04a-b**

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