



## RETAINER PLATE DETAIL

SCALE: 1" = 1'-0"

### NOTES:

1. Retainer plate shall be used to prevent elastomeric bearing pad from walking.
2.  $WH = D + \frac{1}{2}"$ ;  
 $WR = D + 2\frac{1}{2}"$ ;  
 For anchor bolts not exceeding  $1\frac{1}{2}"$   $\phi$ ,  $LR = LS = (LM \text{ or width of flange, whichever is greater}) + 12"$ ;  
 For anchor bolts greater than  $1\frac{1}{2}"$   $\phi$ ,  $LR$  shall be determined by Designer.
3. Diameter of hole = (bolt diameter  $\times$  1.25), rounded up to the nearest  $\frac{1}{4}"$ .

### NOTES: (for use with details on Dwg. No. 8.3.5)

1. Bearing diameters shall be set to even increments of 1", for example: 6", 7", etc.
2. A minimum thickness of a single elastomer layer shall be  $\frac{1}{4}"$ . Cover layer shall be  $\frac{1}{4}"$  for bearings with thickness less or equal to 5", and  $\frac{1}{2}"$  for thicker bearings. Furthermore, it shall be no thicker than 70% of the individual internal layer.
3. Steel laminates shall have a minimum thickness of 11 gage ( $\frac{1}{8}"$ ). Thickness of steel laminates in inches shall be used to calculate total bearing thickness.
4. All bearings on any substructure unit shall have the same nominal compressive stiffness.
5. Elastomeric bearing pads shall have a constant thickness and shall be set level.
6. PTFE sheet has to be bonded to and be recessed into the load plate for at least one-half of its thickness. The minimum thickness of PTFE sheet shall be  $\frac{3}{16}"$  when its diameter is less than or equal to 2'-0", and  $\frac{1}{4}"$  for larger sizes. Use of unfilled PTFE is preferred because it provides a lower coefficient of friction over filled PTFE. The use of dimples with or without lubricant will also affect the coefficient of friction. The Designer shall specify all of these variables in the Construction Notes as well as the coefficient of friction used in the design.
7. See Chapter 3, Part I of the Bridge Manual for additional information and bearing design requirements.



LRFD BRIDGE  
MANUAL, PART II

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SLIDING BEARINGS – STEEL BEAMS

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