

**APPENDIX 4-A**  
**STORAGE OF ZINC**

1. *Description*

a. Zinc is a lustrous, brittle, bluish white metal in slab form. The shape and weight of slabs vary with the producer. The approximate size of a zinc slab is 18” x 9” x 1-3/4,” weighing 50 to 60 pounds. Zinc may or may not be interlocking. When acquired, zinc shall meet Purchase Specification P-59-R1 (Current Edition).

<u>Grade</u>	<u>Grade Symbol</u>
Intermediate BS Prime Western	I Brass Special PW

b. New acquisition will be of the following:

Special High Grade H Prime Western	SH High Grade PW
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2. *Packaging.* Interlocking or non-interlocking slabs may be received loose or in strapped unit loads of 40 to 64 slabs each.

3. *Marking*

a. All marking shall be in English.

b. A brand shall be cast in each slab by which the producer can be identified and each slab shall have the applicable grade symbol or grade name cast or die stamped into the metal.

c. Identification of material.

4. *Storage*

a. Zinc shall be stored on open improved space equivalent to Type A or Type B (stabilized aggregate) as described in Chapter 4 of this Manual, capable of sustaining a load of not less than 3,000 pounds per square foot.

b. As zinc is produced in slabs of variable shapes and sizes, it is impossible to prescribe a precise manner for forming sub-stacks of a uniform count. Generally, the makeup of sub-stacks will be left to the discretion of the Depot Manager. However, all sub-stacks of a specific shape and size must contain a uniform number of slabs, and correspondingly, each stack comprising the several rows of a block stack, except where stack height is reduced in providing step fashion rows of the perimeter, must be of uniform height and uniform total

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count. Where base and spacer pieces are used to provide stack stability and ease of handling, stacks must contain the same number of base and spacer pieces. This method of storage permits the taking of an inventory at any time by count and computation.

c. Residual slabs remaining after uniform stacks are formed shall be placed in a separate sub-stack as part of the same block. The residual sub-stack shall be banded with strapping as necessary to maintain the integrity of the residual sub-stack.

d. The maximum height of stacks, including base and spacer pieces, shall be seven feet (generally four sub-stacks) for the interior stacks and approximately five feet (generally three sub-stacks) for the perimeter stacks.

e. A base comprised of the appropriate number of flat slabs shall be placed edge to edge on the storage surface under each stack. In forming sub-stacks, all slabs shall be arranged so as to provide the greatest stack stability.

f. In forming the outer rows, or perimeter of each block, stacks shall be set up in step fashion with the base slabs and bottom sub-stacks set out approximately 12 inches, the second sub-stack 6 inches, and the third substack against the block. If the reach of the fork lift does not permit forming "step stacks" by using the distances indicated, such distances may be adjusted, but in no case shall the bottom sub-stack be less than 8 inches from the block.

g. In forming the step fashion perimeter stacks of substacks, spacer slabs may be required between the first and second and the second and third sub-stacks. The slabs shall be placed so that they will provide erectness and stability to the stack.

h. As a considerable number of slabs with legs may be generated in obtaining flat slabs for placing on the ground for stabilization and for use as spacers, the excess slabs with legs shall be substituted for top flat slabs on the rows until all are consumed so as to keep the slab count per stack uniform.

i. Aisles separating grades shall be held to a minimum width necessary for the operating of material handling equipment to construct the perimeter stacks as specified. Segregation by grade only is required.

j. Since zinc adapts itself to self-palletizing, wooden pallets of dunnage will not be used in the stacks.

k. A 3" x 5" aluminum tag shall be attached with aluminum wire to the main aisle stack of each storage row. The tag shall show the name of the material, grade, storage location, number of stacks in row (including the residual stack, if any), the number of slabs in each stack, and the total number of slabs in the row. For example:

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(Name and Grade)	Zinc - High Grade
(Storage Location Block No. 4, Area A, Row 3)	4 - A - 3
(Number of stacks and pieces in stack)	14/202/2/136/1/23
(Total pieces in row)	3123

5. *Precautions To Be Taken*

- a. *Health.* None
- b. *General.* None.

6. *Average Storage Factor.* The average storage factor for zinc slabs is approximately 3.0 gross square feet per short ton.

FOR ADDITIONAL INFORMATION ON THIS COMMODITY REFER TO THE MATERIAL SAFETY DATA SHEET OR THE MOST RECENT PURCHASE SPECIFICATION.