Division of Measurement Standards
8500 Fruitridge Road
Sacramento, CA 95826-4808
January 22, 2003

DMS NOTICE
QC - 03-1

Discard: Retain

## TO WEIGHTS AND MEASURES OFFICIALS

## SUBJECT: Statewide Hardware and Building Materials Survey

The statewide survey of hardware and building materials was completed in August 2002. Participating counties randomly selected and tested 862 items throughout the State.

The surveyed items had an average overfill of $0.99 \%$. Of the 862 items tested, 95 were found to be underfilled. Sixteen of the 22 subcategories surveyed had an average overfill. Underfilled products found during the survey were followed up with official lot inspections and any underfilled lots were removed from sale.

The following attachments outline the survey procedures and results for individual subcategories as well as the category as a whole.

If you have any questions regarding this or other surveys, please contact Ken Lake, Program Supervisor, at (916) 229-3047.

Sincerely,


Mike Cleary
Director
(916) 229-3000

Attachments

## Statewide Hardware and Building Materials Survey

County Weights and Measures Officials collected information for this survey during June, July, and August 2002.

## SAMPLE

Thirty retail items were assigned in each of the following subcategories:
12.01 Nails, tacks, brads, and rivets
12.02 Bolts, Nuts, Washers, and Screws
12.04 Builder's Hardware
12.05 Other Hardware
12.06 Electrical Equipment and Supplies
12.07 Plumbing Equipment and Supplies
12.08 Tile and Tile Supplies
12.10 Cement and Cement Color; Stucco, Plaster
12.11 Mortar and Concrete
12.12 Flooring Products except Linoleum, carpet, and rugs
12.13 Linoleum and similar floor coverings
12.15 Molding and Lumber
12.16 Paneling, and Other Wall Sheeting
12.17 Building Paper, Felt, and Plastic Covering
12.18 Composition Shingles and Rolled Roofing
12.19 Wood Shingles, Shakes, and Accessory Supplies
12.20 Metal Roofing Products
12.21 Fiberglass Roofing, Sheets, and Rolls
12.22 Fencing, Flashings, Wire Products, and Posts
12.40 Hardware and Building Materials (Other)

At least 150 retail items were assigned for the following category:

### 12.50 Hardware and Building Materials At Packaging Locations

The samples from individual packers consisted of five randomly selected items of any type or types in the 12.00 category. The total sample size, retail and point of pack was to consist of at least 780 randomly selected individual items.

To insure all regions of the State were evaluated, counties were divided into four regional groups of approximately equivalent populations. Each group of counties selected and tested one quarter of the total sample.

## SELECTION

Establishments visited for purchases were selected randomly by participating counties. No more than three items from a single subcategory and not more than 15 items overall were selected from a single retail establishment. All retail stores selling hardware and building products were considered for selection.

Packagers (sub-category 12.50) were defined as any establishment packaging and labeling products for retail sale. Packagers were also chosen using random numbers.

## INSPECTION PROCEDURE

After purchase, packages were either checked on-site or taken to the local county quantity control laboratory for testing. Each package was opened to determine actual net content. Errors were recorded by comparing actual contents to the labeled net content.

## Hardware and Building Materials 01/24/03

| Category | Description | Number Tested | Number Overfilled | \% Compliance | Number <br> No Error | Number Underfilled | Ave \% Error | Std <br> Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12.01 | Nails, tacks, brads, and rivets | 37 | 20 | 89.19 | 13 | 4 | 1.03 | 3.13 |
| 12.02 | Bolts, Nuts, Washers, and Screws | 36 | 15 | 91.67 | 18 | 3 | 1.36 | 3.05 |
| 12.04 | Builder's Hardware | 35 | 8 | 94.29 | 25 | 2 | 1.22 | 5.36 |
| 12.05 | Other Hardware | 34 | 3 | 91.18 | 28 | 3 | -0.36 | 1.59 |
| 12.06 | Electrical Equipment and Supplies | 35 | 20 | 94.29 | 13 | 2 | 1.46 | 2.64 |
| 12.07 | Plumbing Equipment and Supplies | 33 | 15 | 93.94 | 16 | 2 | 1.05 | 1.75 |
| 12.08 | Tile and Tile Supplies | 36 | 13 | 75.00 | 14 | 9 | 0.85 | 3.05 |
| 12.10 | Cement and Cement Color; Stucco, Plaster | 34 | 26 | 76.47 | 0 | 8 | 2.79 | 4.56 |
| 12.11 | Mortar and Concrete | 36 | 28 | 77.78 | 0 | 8 | 1.89 | 5.76 |
| 12.12 | Flooring Products except Linoleum, carpet, and rugs | 29 | 8 | 96.55 | 20 | 1 | 0.57 | 1.73 |
| 12.13 | Linoleum and similar floor coverings | 31 | 6 | 96.77 | 24 | 1 | 0.32 | 0.98 |
| 12.15 | Molding and Lumber | 36 | 12 | 91.67 | 21 | 3 | -0.24 | 2.21 |
| 12.16 | Paneling, and Other Wall Sheeting | 36 | 6 | 86.11 | 25 | 5 | -0.60 | 6.13 |
| 12.17 | Building Paper, Felt, and Plastic Covering | 38 | 11 | 73.68 | 17 | 10 | -0.64 | 3.83 |
| 12.18 | Composition Shingles and Rolled Roofing | 34 | 13 | 100.00 | 21 | 0 | 2.29 | 6.51 |
| 12.19 | Wood Shingles, Shakes, and Accessory Supplies | 32 | 10 | 84.38 | 17 | 5 | 0.25 | 1.54 |
| 12.20 | Metal Roofing Products | 36 | 5 | 88.89 | 27 | 4 | -0.09 | 1.01 |
| 12.21 | Fiberglass Roofing, Sheets, and Rolls | 33 | 11 | 87.88 | 18 | 4 | 0.27 | 0.96 |
| 12.22 | Fencing Flashings, Wire Products, and Posts | 36 | 17 | 94.44 | 17 | 2 | 1.42 | 4.63 |
| 12.40 | Hardware and Building Materials NEC | 31 | 11 | 100.00 | 20 | 0 | 0.84 | 2.32 |
| 12.50 | Hardware and Building Materials At Packing Location | 174 | 99 | 89.08 | 56 | 19 | 1.82 | 3.68 |
|  | Totals | 862 | 357 | 88.98 | 410 | 95 | 0.99 | 3.72 |

