## About the KCMA Certification Program

- The Kitchen Cabinet Manufacturers Association Certification Program assures the specifier or user of kitchen cabinets and bath vanities that the cabinet bearing the blue and white seal complies with the rigorous standards set by the American National Standards Institute (ANSI) and sponsored by the Kitchen Cabinet Manufacturers Association (KCMA). Further, the cabinet is an exact duplicate of samples that have been independently tested for conformance to ANSI/KCMA A161.1-2012.
- The KCMA Certification Program is open to all cabinet manufacturers. Manufacturers may certify one, several, or all of their cabinet lines. Because of this option, only those lines certified are listed in the annual KCMA Directory of Certified Cabinet Manufacturers.
- Compliance with ANSI/KCMA standards is assured by initial cabinet testing, periodic unannounced plant pick-up and testing, and additional testing resulting from complaints. All testing is performed by an experienced independent laboratory.
- These cabinets also comply with the provision of Paragraph 611-1.1, "HUD Minimum Property Standards - Housing 4910.1" 9/8/86.
- Companies not licensed with the KCMA Certification Program may not claim or imply conformance with these standards for their products. KCMA, as the proprietary sponsor, reserves the right to question any claims of conformance and to test the products of any manufacturer making such claims. Should KCMA discover that a manufacturer is falsely representing that his products meet these standards, KCMA will take appropriate legal action.

## Requirements Cabinets Must Meet to Earn the KCMA Certification Seal

- All cabinets must be fully enclosed with backs, bottoms, sides, and tops on wall cabinets; and backs, bottoms, and sides on base cabinets, with certain specified exceptions on kitchen sink fronts, sink bases, oven cabinets, and refrigerator cabinets.
- All cabinets designed to rest on the floor must be provided with a toe space at least two inches deep and three inches high.
- All utility cabinets must meet the same construction requirements as base and wall cabinets.
- Doors and drawers must be properly aligned, have means of closure, and close without excessive binding or looseness.
- All materials must ensure rigidity in compliance with performance standards.
- Face frames, when used, must provide rigid construction.
- For frameless cabinets, the ends, tops/bottoms, and back shall be of thickness necessary to provide rigid construction.
- Corner or lineal bracing must be provided at points where necessary to ensure rigidity and proper joining of various components.
- All wood parts must be dried to a moisture content of 10 percent or less at time of fabrication.
- All materials used in cabinets must be suitable for use in the kitchen and bath environment where they may be exposed to grease, solvents, water, detergent, steam and other substances usually found in these rooms.
- All exterior exposed surfaces and edges except the edges of end panels and the edges of back panels, shall be free of saw marks and other imperfections and shall be filled and sanded,edge-banded, or otherwise finished to ensure compliance with the performance standards.
- All exterior exposed parts of cabinets must have nails and staples set and holes filled.
- All exposed construction joints must be fitted in a workman-like manner consistent with specifications.
- Exposed cabinet hardware must comply with Builders Hardware Manufacturing Association finishing standards.

## Five Structural Tests Measure Cabinet's Structural Integrity

- All shelves and bottoms are loaded at 15 pounds per square foot, and loading is maintained for seven days to ensure that there is no excessive deflection and no visible sign of joint separation or failure of any part of the cabinets or the mounting system.
- Mounted wall cabinets are gradually loaded to 600 pounds without any visible sign of failure in the cabinet or the mounting system.
- To test the strength of base-front joints, a load of 250 pounds is applied against the inside of cabinet-front stiles for cabinets with drawer rail, or 200 pounds is applied for cabinets without drawer rail, to ensure reliable front joints that will not open during stress in service or during installation.
- To test the ability of shelves, bottoms, and drawer bottoms to withstand the dropping of cans and other items, a three-pound steel ball is dropped from six inches above the surface. After the test the drawer must not be damaged and must operate as before the test with no visible sign of joint separation or failure of any part of the cabinet or mounting system.
- To test the ability of cabinet doors and connections to withstand impacts such as children may cause in falling against a cabinet, a 10-pound sandbag is used to strike the center of a closed cabinet door and repeated with the door opened to a 45-degree angle. The door must operate as before the test and show no damage or sign of separation or failure in the system.

## Two Drawer Tests Required

- To test the ability of drawers and drawer mechanisms to operate with loading during normal use, drawers are loaded at 15 pounds per square foot and operated through 25,000 cycles. The drawers must then remain operable with no failure in any part of the drawer assembly or operating system, and drawer bottoms must not be deflected to interfere with drawer operation.
- To test the ability of the drawer-front assembly to withstand the impact of closing the drawer under normal use, a three-pound weight is dropped 8 inches against the drawer assembly. After 10 drops, there must be no evidence of looseness or structural damage to the drawer-front assembly that impairs operation.

## Two Door Operation Tests Measure Durability

- To test the ability of doors, hinges, and means of attachment to withstand loading, 65 pounds of weight is applied on the door. The weighted door is slowly operated for 10 cycles from 90 degrees open to 20 degrees open and returned to the 90 degree position. The door must remain weighted for 10 minutes, after which the door and hinges must show no visible signs of damage, and connections between cabinet-and-hinge and door-and-hinge must show no sign of looseness.

- To test the ability of doors, door-holding devices, hinges, and attachment devices to operate under the stress of normal use, doors are opened and closed through a full 90-degree swing for 25,000 cycles. At the test's conclusion, the door must be operable, the door-holding device must hold the door in closed position, hinges must show no visible signs of damage, connections between cabinet-and-hinge and door-and-hinge must show no sign of looseness, and other specifications must be met.

## Four Finish Tests Conducted

- These tests create, in accelerated form, the cumulative effects of years of normal kitchen conditions of pre-finished cabinets. Cabinet finishes are inspected to ensure that stringent standards of appearance are also met.To test the ability of the finish to withstand high heat, a cabinet door is placed in a hotbox at 120 degrees Fahrenheit and 70 percent relative humidity for 24 hours. After this test the finish must show no appreciable discoloration and no evidence of blistering,

checks, or other film failures.

- To test the ability of the finish to withstand hot and cold cycles for prolonged periods, a cabinet door is placed in a hotbox at 120 degrees Fahrenheit and 70 percent relative humidity for one hour, removed and allowed to return to room temperature and humidity conditions, and then placed in a coldbox for one hour at -5 degrees Fahrenheit. The cycle is repeated five times. The finish must then show no appreciable discoloration and no evidence of blistering, cold checking, or other film failure.
- To test the ability of the finish to withstand substances typically found in the kitchen and bath, exterior exposed surfaces of doors, front frames, drawer fronts and end panels are subjected to vinegar, lemon, orange and grape juices, tomato catsup, coffee, olive oil, and 100-proof alcohol for 24 hours and to mustard for one hour. After this test, the finish must show no appreciable discoloration, stain, or whitening that will not disperse with ordinary polishing and no indication of blistering, checks, or other film failure.
- To test the ability of the finish to withstand long periods of exposure to a detergent and water solution, a cabinet door edge is subjected to exposure to a standardized detergent formula for 24 hours. The door edge must then show no delamination or swelling and no appreciable discoloration or evidence of blistering, checking, whitening, or other film failure.