

# CASTinTACT®

## Concrete Tactile Warning Panels

### Color Contrast Testing

**ADAAG 4.29.2** requires that detectable warning contrast visually with adjoining surfaces, either dark on light or light on dark.

To ensure adequate visual detection CASTinTACT® recommends a minimum luminance contrast 40% and a minimum reflectance for the lighter color. Contrast in percent is determined by:

Contrast =  $((B1-B2)/B1) \times 100$  where B1 = light reflectance value (LRU) of the lighter area and B2 = light reflectance value (LRU) of the darker area. Note that in any application both white and black are never absolute: B1 never equals 100 and B2, is always greater than 0."

Recent research finding report the most effective warning colors include federal yellow (against dark adjacent surfaces), brick red (against light surfaces), and black-and-white color combinations which provide internal contrast.

The equipment used to test contrast ratios for CASTinTACT® is a Datacolor Spectrophotometer. We are measuring percentage reflectance at 420 nm using D65 Illuminant (Daylight). Measurement type is specular included using 30 mm diameter measurement area and 10 degree angle. We use an average of 2 readings for each sample.



Note: Test results will vary based on shade and texture of surrounding surface to compare against.

CASTinTACT® 3 Dry Surface	Color Contrast vs (Gray Textured)	Color Contrast vs (White Textured)
White	71.052	0.000
Black	64.103	87.603
Salem Red	65.575	88.112
Yellow	46.709	81.596
Brown	56.655	85.031

CASTinTACT® 3 Wet Surface	Color Contrast vs (Gray Textured)	Color Contrast vs (White Textured)
White	80.086	0.000
Black	60.022	90.941
Salem Red	64.065	91.857
Yellow	50.095	88.691
Brown	61.237	91.216