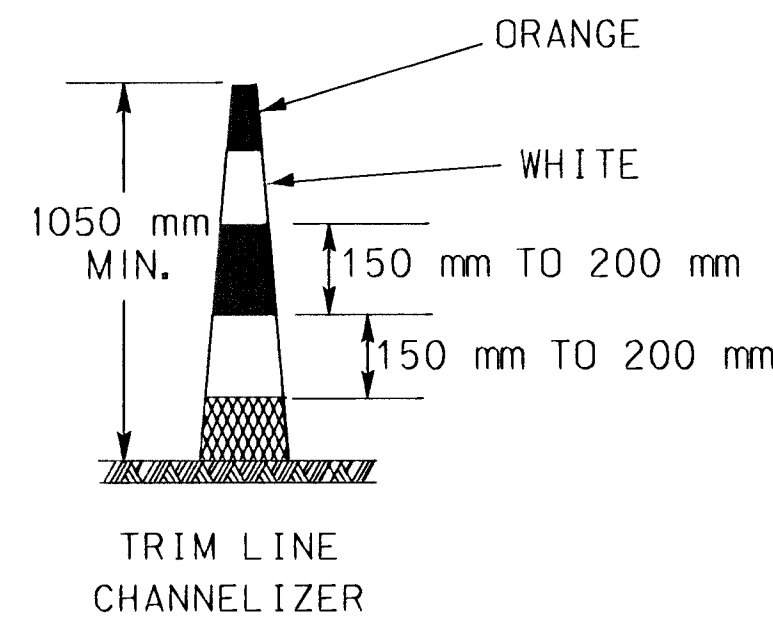
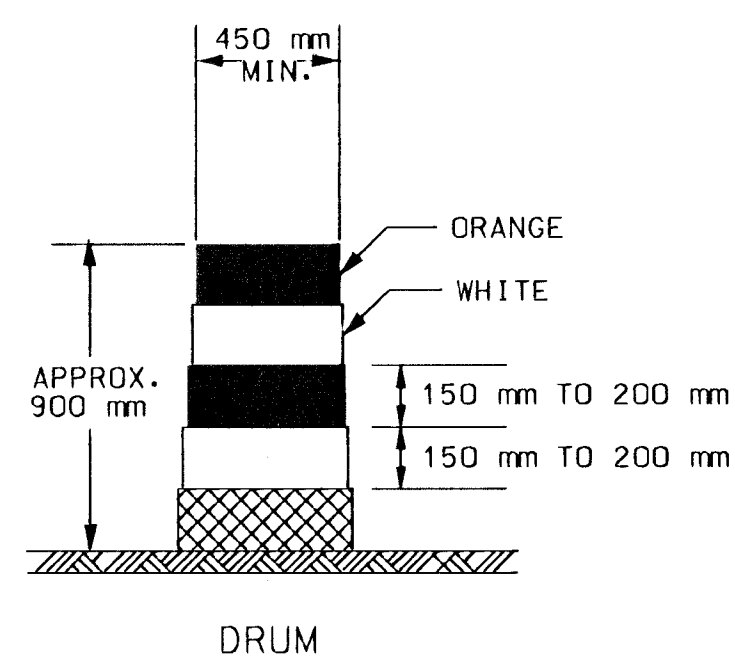
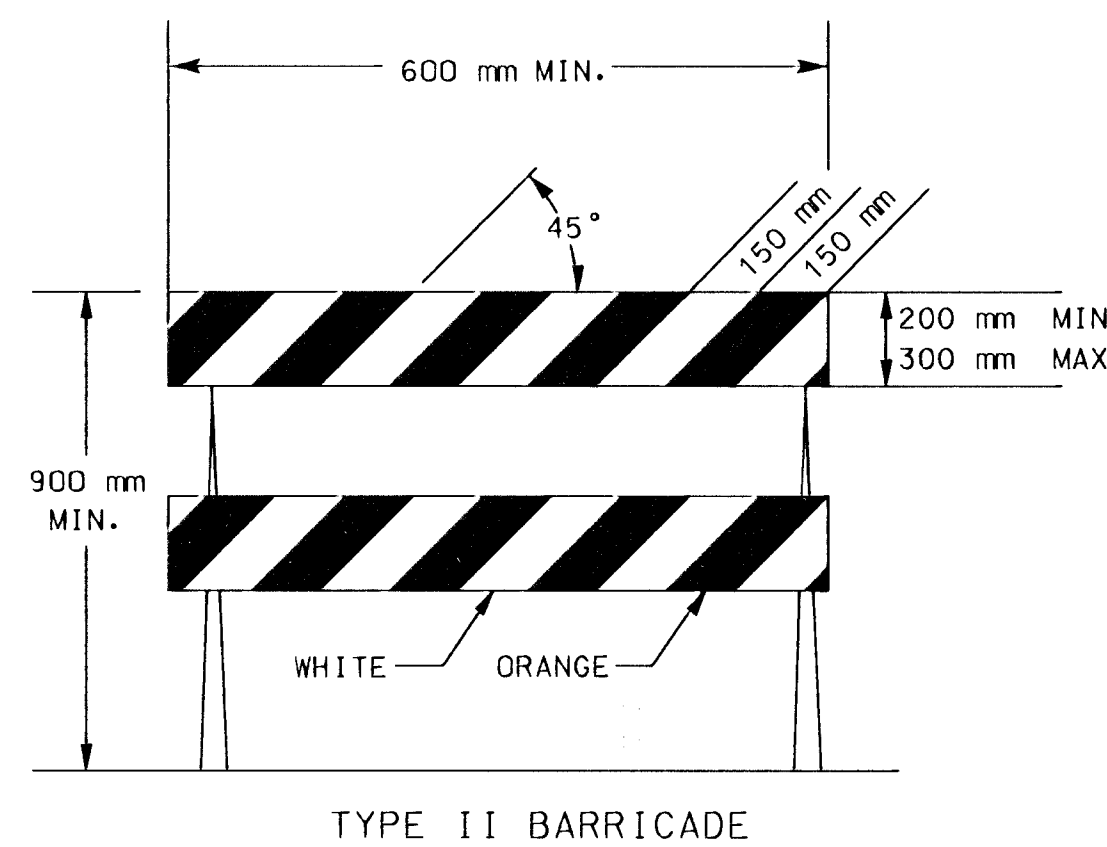


FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87-N-0200-01	2001	61	78



DRUMS AND TRIM LINE CHANNELIZERS SHALL BE RETROREFLECTORIZED FULL CIRCUMFERENCE WITH AT LEAST TWO ORANGE AND TWO WHITE 150 mm TO 200 mm WIDE STRIPES. ADDITIONAL STRIPES MAY BE NON-REFLECTIVE. IF THERE ARE NON-REFLECTIVE SPACES BETWEEN ADJACENT STRIPES, THEY SHALL BE NO MORE THAN 50 mm WIDE.

ALL RETROREFLECTIVE STRIPES ON DRUMS SHALL BE TYPE III HIGH PERFORMANCE SHEETING. THE WHITE STRIPES ON TRIM LINE CHANNELIZERS SHALL BE TYPE III HIGH PERFORMANCE SHEETING. THE ORANGE STRIPES ON TRIM LINE CHANNELIZERS SHOULD BE FLUORESCENT ORANGE PRISMATIC SHEETING; HOWEVER, TRIM LINE CHANNELIZERS PURCHASED PRIOR TO NOVEMBER 1, 2000, MAY HAVE STRIPES OF ORANGE TYPE III HIGH PERFORMANCE SHEETING, PROVIDED THE DEVICES ARE SPACED ACCORDING TO THE CHART BELOW. PROJECTS LET AFTER JANUARY 1, 2002, WILL REQUIRE THAT THE ORANGE STRIPES ON ALL TRIM LINE CHANNELIZERS BE FLUORESCENT ORANGE PRISMATIC SHEETING.



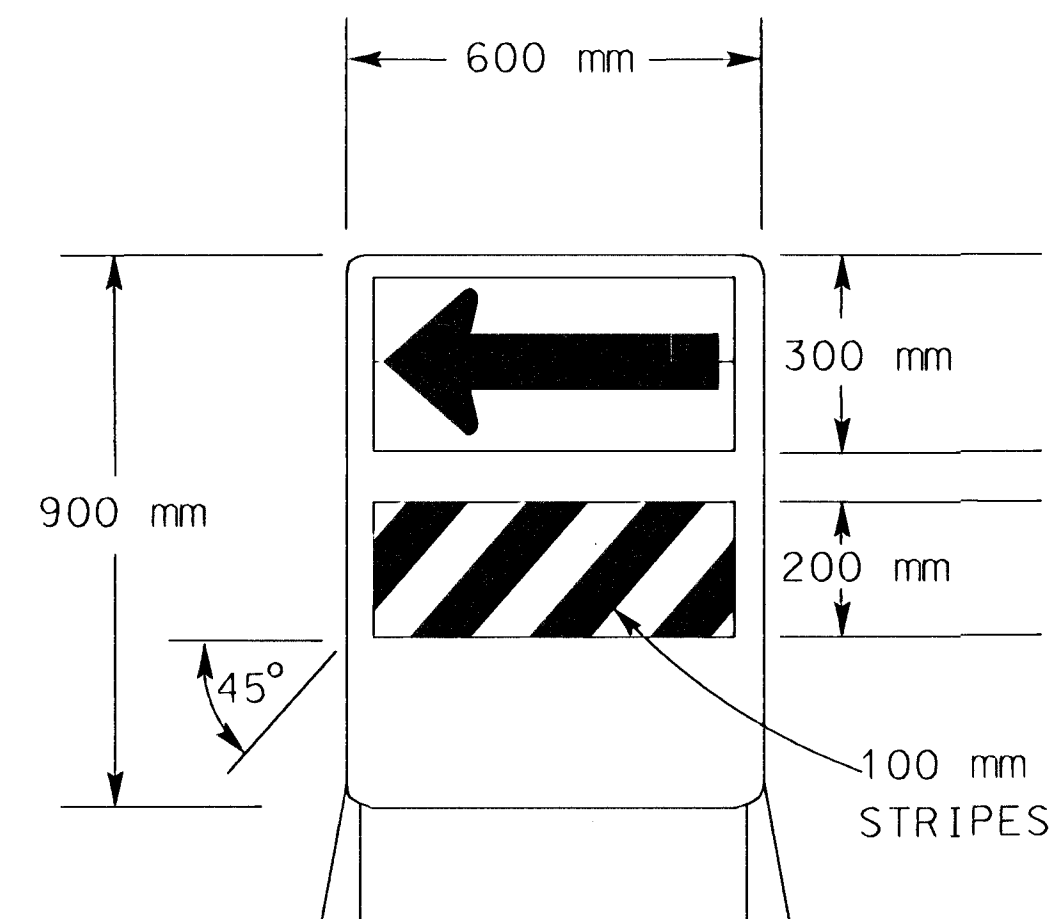
FOR WOODEN BARRICADES, NOMINAL LUMBER DIMENSIONS WILL BE SATISFACTORY.

FOR RAILS LESS THAN 900 mm LONG, 100 mm WIDE STRIPES MAY BE USED.

THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL BE FULLY REFLECTORIZED WITH TYPE III HIGH PERFORMANCE RETROREFLECTIVE SHEETING.

BARRICADES USED ON ROADWAYS WITH SPEED LIMITS OF 45 MPH OR MORE SHALL HAVE A MINIMUM OF 0.175 SQ m OF RETROREFLECTIVE AREA FACING TRAFFIC.

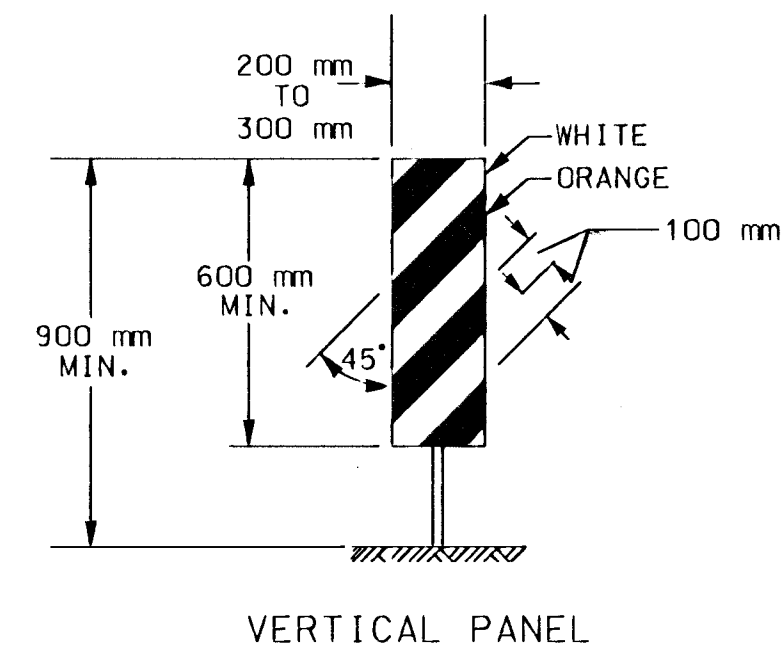
THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



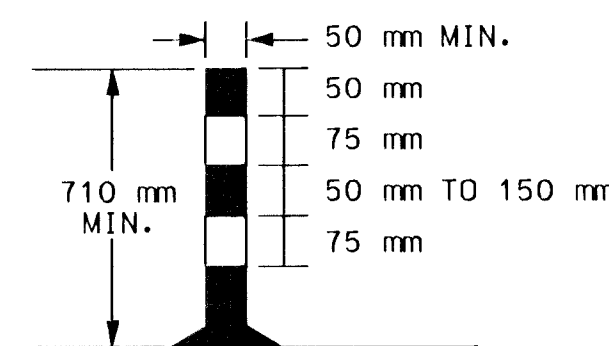
DIRECTION INDICATOR BARRICADE

THE ARROW PANEL SHALL BE BLACK ON FLUORESCENT ORANGE PRISMATIC GRADE SHEETING. THE STRIPES SHALL BE ORANGE AND WHITE TYPE III HIGH PERFORMANCE RETROREFLECTIVE SHEETING SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS.

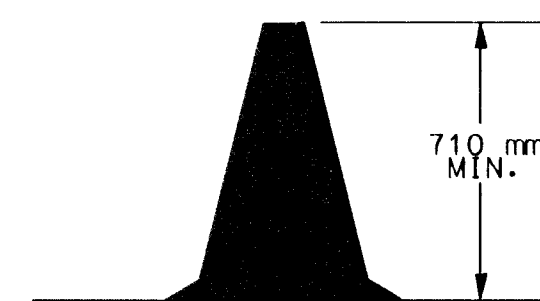
THE DIRECTION INDICATOR BARRICADE SHOULD BE USED IN SERIES TO DIRECT THE MOTORIST INTO THE INTENDED LANE OF TRAVEL. THE ARROW PANEL SHOULD NOT BE VISIBLE TO OPPOSING TRAFFIC.



THE ENTIRE AREA OF VERTICAL PANELS, BOTH FRONT AND BACK, SHALL BE FULLY REFLECTORIZED WITH TYPE III HIGH PERFORMANCE RETROREFLECTIVE SHEETING. VERTICAL PANELS USED ON ROADWAYS WITH A SPEED LIMIT OF 45 MPH OR GREATER SHALL HAVE A MINIMUM OF 0.175 SQ m OF RETROREFLECTIVE AREA FACING TRAFFIC. THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TUBULAR MARKERS



ORANGE CONES

CONES MAY BE USED AS CHANNELIZING DEVICES FOR DAYTIME OPERATIONS ONLY. THEY WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE SUBSIDIARY. TO OTHER TRAFFIC CONTROL BID ITEMS. THE ENGINEER MAY REQUIRE THAT CONES BE SUPPLEMENTED BY OTHER TRAFFIC CONTROL DEVICES IN CERTAIN SITUATIONS SUCH AS OPEN TRENCHES.

[illegible]

- (1) Not allowed on freeways or expressways, or for durations of more than three days.
- (2) Place at normal spacing if sheeted with fluorescent orange prismatic sheeting. Place at $\frac{1}{2}$ spacing in tapers but pay at the rate of one device per full space if orange stripes are Type III high performance sheeting. Intermixing of trim line channelizers with fluorescent orange and orange Type III high performance sheeting is not allowed.
- (3) Slashes must slope down toward direction traffic is to pass.
- (4) Fixed tubular markers or Vertical Panels may be substituted for any of the above situations with the approval of the Engineer.

TAPER FORMULAS:

L = WS FOR SPEEDS OF 45 MPH OR MORE

$L = WS^2/60$ FOR SPEEDS OF 40 MPH OR LESS

WHERE: L = MINIMUM LENGTH OF TAPER IN METERS
S = NUMERICAL VALUE OF POSTED SPEED
PRIOR TO WORK STARTING IN MPH
W = WIDTH OF OFFSET IN METERS

3			
2			
1			
NO.	DATE	REVISION	BY APP'D

KANSAS DEPARTMENT OF TRANSPORTATION			
CHANNELIZING DEVICES			
TE702SI			9/1/00
FWHA APPROVAL	9-1-00	APP'D Michael P. McKenna	
DESIGNED L.E.R.	DETAILED B.A.H.	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.