

Code of Practice (Part 4) Signages



**Institute of Urban
Transport**

**Ministry of Urban
Development**

IUT

This document has been prepared by the Transportation Research and Injury Prevention Programme (TRIPP) for the Institute of Urban Transport (IUT), Ministry of Urban Development. The primary purpose of this document is to provide a code of practice for various Urban Road Components. It has been developed in five parts. This is part four of five, which elaborates various norms and standards for signages.

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1. INTRODUCTION

Signage is a comprehensive system of Regulatory, Informatory and Warning messages corresponding to the information for all road user groups. An effective Signage System keeps the road user informed of the following:

1. Important destinations and routes
2. Unexpected conditions
3. Traffic laws
4. Facilities like Public conveniences and Parking areas.
5. Differently-abled environments, facilitated by the following elements:
 - i. Inclusive Signages: combination of easily recognisable symbols using contrasting colors, Audible Signals or Auditory Signals along with a Braille marking and International symbol of Accessibility (ISA). The international symbol of access (ISA) also known as the International Wheelchair Symbol. It is used as an informatory sign with blue background and image of a person using a wheelchair overlaid in white.
 - ii. Guiding and Warner Tactile Blocks
 - iii. Railings wherever necessary

2. ORIENTATION, MATERIALS AND MOUNTING

Table 2-1 Height of Symbol of access for varying viewing distances

Required viewing Distance(m)	Maximum Size of Symbol(mm)
0.7	60 x 60
7.18	110 x 110
18+	Min. 200 x 200
	Max. 450 x 450

Table 2-2 Symbols specifications

S. No.	Title	Specifications
1.	User Groups	The Signage System of information is designed keeping in consideration different road user groups. A road user can fall under any of the following categories: Pedestrians Cycle users or Non-Motorized Vehicle users Motorized Vehicle users Bus users Differently-Abled for all the above mentioned groups
2.	Physical Parameters	<u>Text Height:</u> The letter size could be decided with respect to the viewing distance and speed of the vehicle, so as to achieve legibility without signage being too large or obtrusive. In order to determine height of the characters on the basis of viewing distance, line-of-

sight and the height of the sign from the finished floor level should also be considered.¹

Table 7.2 and Table 7.3² show the height of the text on the basis of the viewing distance and on the basis of speed, sighting distance and distance from the centerline, respectively.

Table 2-3 'Height' of letter for varying viewing distance

Required viewing Distance(m)	Maximum height of Letter(mm)
2	6
3	12
6	20
8	25
12	40
15	50
25	80
35	100
40	130
50	150

¹ Page 23, Chapter – 6, Sign Design, TCRP Report 12

² Page 7, Size of the Letters, Code of Practice for Road Signs, Indian Road Congress -67-2001

Table 2-4 Acceptable limits for Size of the Letters

Design Speed (kmph)	Minimum 'x' Height of the Letters(cms)	Minimum Sighting Distance(m)	Maximum Distance from the Centre Line (m)
45	7.5	45	12
60	10.0	60	16
80	12.5	80	21
90	15.0	90	24
120	20.0	115	32

Letter Height Calculation

The following formula is another method to evaluate the letter height for signages, on the basis of number of words to be displayed, speed of the vehicle and the legibility factor.

Equation 1- Letter Height Calculation

$$\text{Letter Height} = (N/3 + 2) f$$

Where: N = Number of words.

f = Legibility Factor. Found by dividing vehicle speed in feet per second by 40 (the legibility distance per inch of letter height). Even though the Traffic Manual uses 50 feet per inch, due to the increasing average age of motorists, 40 feet per inch should be used and will be incorporated in the next update to the Traffic Manual.

Table 2-5 Letter Height (in mm) matrix (post mounted)

Number of words																			
Speed in km/hr	Ft / s	f (legibility factor) = speed in ft/s by 40	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	
			10	9.1	0.23	25*	25*	25*	25*	25*	25*	25	27	29	31	33	35	37	39
15	13.7	0.34	25*	25*	26	29	32	35	37	40	43	46	49	52	55	58	60	75	
20	18.2	0.46	27	31	35	39	43	47	51	55	58	62	66	70	74	78	82	101	
25	22.8	0.57	34	39	43	48	53	58	63	68	72	77	82	87	92	97	101	125	
30	27.3	0.68	40	46	52	58	63	69	75	81	86	92	98	104	109	115	121	150	
35	31.9	0.80	47	54	61	68	75	81	88	95	102	108	115	122	129	135	142	176	
40	36.5	0.91	54	62	69	77	85	92	100	108	116	123	131	139	146	154	162	200	
45	41.0	1.03	61	70	78	87	96	105	113	122	131	140	148	157	166	174	183	227	
50	45.6	1.14	68	77	87	97	106	116	125	135	145	154	164	174	183	193	203	251	
55	50.1	1.25	74	85	95	106	116	127	138	148	159	169	180	191	201	212	222	275	
60	54.7	1.37	81	93	104	116	128	139	151	162	174	186	197	209	220	232	244	302	

*Minimum letter height according to design guidelines, which gives the thumb rule of 25mm per meter of viewing.

Table 2-6 Letter Height (in mm) Matrix (Overhead Signage)

Number of words			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	20	
Speed in km/hr	Ft / s	f (legibility factor) = speed in ft/s by 40																	
10	9.1	0.23	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*
15	13.7	0.34	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*
20	18.2	0.46	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	na-95	101
25	22.8	0.57	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	97	101	125	
30	27.3	0.68	95*	95*	95*	95*	95*	95*	95*	95*	95*	95*	98	104	109	115	121	150	
35	31.9	0.80	95*	95*	95*	95*	95*	95*	95*	95	102	108	115	122	129	135	142	176	
40	36.5	0.91	95*	95*	95*	95*	95*	95*	100	108	116	123	131	139	146	154	162	200	
45	41.0	1.03	95*	95*	95*	95*	96	105	113	122	131	140	148	157	166	174	183	227	

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50	45.6	1.14	95*	95*	95*	97	106	116	125	135	145	154	164	174	183	193	203	251
55	50.1	1.25	95*	95*	95	106	116	127	138	148	159	169	180	191	201	212	222	275
60	54.7	1.37	95*	95*	104	116	128	139	151	162	174	186	197	209	220	232	244	302

- Border:

Each sign shall have a border of the same color as the legend, at or just inside the edge, unless otherwise specified. The corners of all sign borders shall be rounded.³

- Diagrammatic Signs/ Symbols:

Symbols used for the signages, unless otherwise stated have been used as prescribed in standards reference – Standard Highway Signs. Direction of the arrows used in the signages can be revised to suit the usage with respect to the lane designation (left/right hand drive).

- Color:

Signages follow color code on the basis of their typology. For better legibility the colors used are retro-reflective. The background and the legend/Symbols are of contrasting colors for better legibility.

3.

Types of Signages

The Signage System comprises of three internationally accepted categories of signages, on the basis of the user group to be addressed and information to be delivered, represented using three basic geometric shapes.

- Regulatory Signs - Circle

³ Page 2A-9, Chapter 2A, MUTCD for Streets and Highways, 2003 Edition - Revision 2

Mounting

- Warning Signs - Triangle
- Informatory Sign - Square/Rectangular

The Sign boards are mounted on either single poles, double poles, overhead cantilevered/gantries or on service poles. The mounting type is decided on the basis of the following:

- User Group to be addressed
- Size of the Signage
- Location

3. TYPE OF SIGNAGES

As per standards like IRC, MUTCD and TCRP, Road Signs have been categorized on the basis of their function, which is to provide messages regarding the regulations, warnings and guidance information for the road user.⁴ The categories of the road signages are defined as under:

3.1. REGULATORY SIGNAGES:

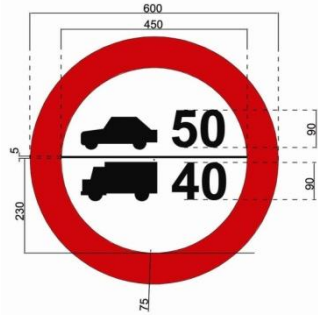
To inform road users of traffic laws. These include signs such as, STOP, YIELD, SPEED LIMIT, etc. Shape & color: The signs shall be in shape of a circle, with a red (retro-reflective) border and a white background.

⁴ Page 6, Indian Road Congress (IRC: 67-2001) & Page 2A-8, MUTCD -2003 Edition & TCRP-Report 12.

Signs from Code of Practice for Road Signages, IRC: 67-2001

1. Speed Limit Sign: For Truck and Car Users

Size : 600mm Diameter
Background : White
Border : Red
Symbol / Text : Black



2. No Free Left: Used at signalised left turnings.

Top: 600mm Diameter
Bottom: 600mm x 200mm
Background: White
Border: Top - Red, Bottom- Black - 10mm
Symbol / Text : Black

New Signs⁵

3. Prohibited Parking in Non- Motorized Lanes: Used to prohibit parking on the segregated cycle lane.

Size: Top - 600mm Diameter, Bottom: 350mm x 250mm
Background: White
Border: Top - Red, Bottom - Black - 10mm
Symbol / Text: Black



⁵ Signages not mentioned in IRC 67-2001, introduced as per urban road usage requirements.

4. Tow Away Zone: Use of tow away signs at strategic locations where there is 'No Parking'.

Size:

Top: 600mm Diameter

Bottom: 350mm x 200mm

Color:

Background: White

Border :

Top: Red

Bottom: Black

Symbol / Text : Black



Symbol / Text : Black

5. Compulsory MV Lane:

Regulatory sign for segregated MV Lane, with an arrow pointing towards the location

Size : 900mm x 900mm

Color

Background : White

Border :

Top: Red

Bottom: Black

6. Compulsory Bus Lane: Hung at the gantry right above the bus lane, at the far sight of the junction to guide bus users to their dedicated lanes.



Size : 900mm x 900mm

Color

Background : White

Border

Top: Black (outer) and Red (inner)

Bottom: Black

Symbol / Text : Black

An arrow could be added for assistance.



7. Left Bus Lane:

Size : 900mm x 900mm

Color :

Background : White

Border

Top: Red

Bottom: Black

Symbol / Text : Black



8. Bus Lane Regulatory

Size : 600mm x 900mm

Color

Background : White



Border :





Top: Black (outer) and Red (inner)




Bottom: Black




Symbol / Text : Black





Table 3-1 Stop & Give Way Signs

Stop Sign		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Give Way Sign		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
PROHIBITORY SIGNS		
Straight Prohibited / No Entry		PROPOSED



		
One way		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Vehicles prohibited in both directions		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black


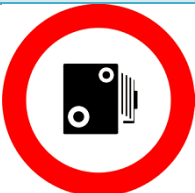

All motor vehicles prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Trucks Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Bullock cart & Hand Carts Prohibited		Size : 600mm Diameter
		Color : Background : White



		Border : Red Symbol / Text : Black
Bullock Cart Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Tongas Prohibited		
Hand Carts Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red




		Symbol / Text : Black
Cycle Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Pedestrian Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Right/Left Turn Prohibited		

U-Turn Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Overtaking Prohibited		Size : 600mm Diameter
Horn Prohibited		Color : Background : White Border : Red Symbol / Text : Black
No Parking		Size : 600mm Diameter
		Color :

		Background : White Border : Red Symbol / Text : Black
No Stopping / Standing		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Speed Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black

Minimum Speed Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Speed Camera Signs		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Width Limit		Size : 600mm Diameter
		Color : Background :

		White Border : Red Symbol / Text : Black
Height Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Length Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black

Load Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Axle Load Limit		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Give Priority to Traffic Coming Traffic Opposite Direction		Size : 600mm Diameter
		Color : Background : White













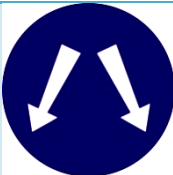
		Border : Red Symbol / Text : Black
Stop for Police Check		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Restriction Ends Sign		





Table 3-2 Compulsory Direction Control And Other Signs




Compulsory Turn Left/Right		



<p>Compulsory Ahead & Turn Left/ Right</p>			
<p>Compulsory Ahead</p>			<p>Size : 600mm Diameter</p>
			<p>Color : Background : White Border : Red Symbol / Text : Black</p>
<p>Compulsory Keep Left</p>			<p>Size : 600mm Diameter</p>
			<p>Color : Background : White Border : Red Symbol / Text : Black</p>

Compulsory cycle track/cycles only		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Compulsory sound horn		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Pedestrians only		Size : 600mm Diameter
		Color : Background : White



		Border : Red Symbol / Text : Black
Bus way / buses only		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Pass either side		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black



<p>No Tractors/Construction vehicles</p>		<p>Size : 600mm Diameter</p>
		<p>Color : Background : White Border : Red Symbol / Text : Black</p>
<p>No riding</p>		<p>Size : 600mm Diameter</p>
		<p>Color : Background : White Border : Red Symbol / Text : Black</p>
<p>No vehicle carrying dangerous goods</p>		

No Power vehicles drawing a trailer		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Combination Right Turn & U - Turn Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Hitch Hiking Prohibited		Size : 600mm Diameter
		Color : Background : White

		Border : Red Symbol / Text : Black
Stop Pay Toll		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Indication Of Cameras Used Traffic Lights		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black

Buses Prohibited		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Left Turn Prohibited On Red Signal		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Compulsory Snow Chain		Size : 600mm Diameter
		Color : Background : White

		Border : Blue Symbol / Text : Black
Compulsory Seat Belt		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Compulsory Route For Cyclists & Pedestrians		Size : 600mm Diameter
		Color : Background : White Border : b Symbol / Text : Black

Segregated Cycle & Pedestrian Route		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black
Compulsory Route for Cycles & Buses		Size : 600mm Diameter
		Color : Background : White Border : Red Symbol / Text : Black

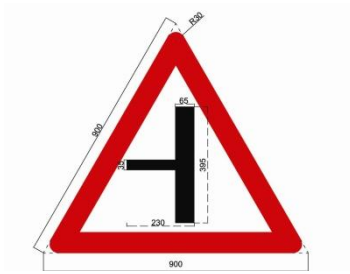
3.2. WARNING SIGNAGES:

To alert the road users of unexpected conditions. These include pedestrian crossing, 'T' or 'Y' intersection, etc. Shape & color: The signs shall be in shape of an equilateral triangle, with apex pointing upwards. It has a red (retro reflective) border and white background. The symbol will be black. To give emphasis to pedestrians and cyclists certain symbols have yellow background.

Table 3-3 Warning Signages

T' Junctions: Used at T-Junctions, this sign can be mounted on a blinker pole.

1.



Size : 900mm Each Side

Color :
Background : White
Border : Red
Symbol / Text : Black

Modified Signs from Code of Practice for Road Signages, IRC: 67-2001⁶

2. **School:** Used to warn motorised vehicle users of school ahead.

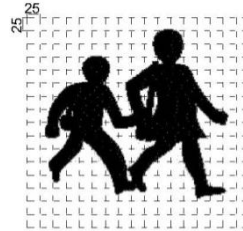


Size : 900mm Each Side

Color :

Background	: White
Border	: Red
Symbol / Text	: Black

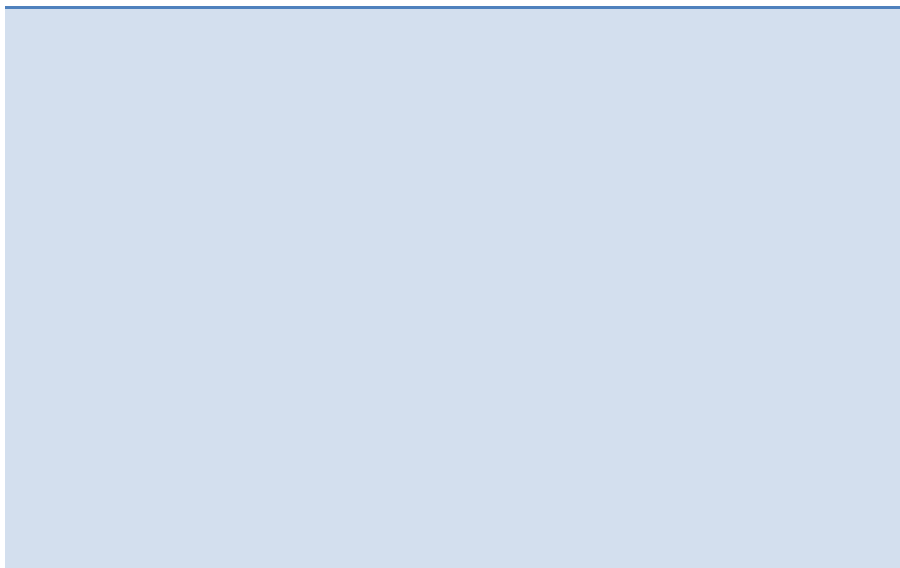
⁶ Signages from IRC:67-2001, modified as per urban road usage by taking references from MUTCD for Streets and Highways 2003 Edition, TCRP Report 12



3. **Prohibited Parking in Non- Motorized Lanes**: Used to prohibit parking on the segregated cycle lane.
-

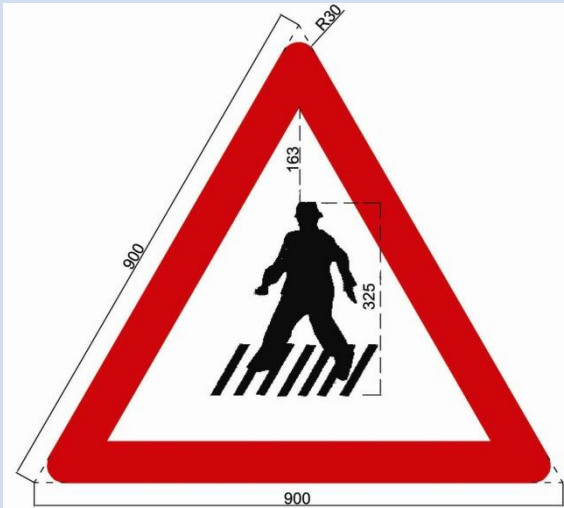


Size :
Top: 900mm Each Side
Bottom: 900mm x 300mm



Color :
Background : White
Border :
Top: Red
Bottom: Black - 10mm
Symbol / Text : Black

4. **Pedestrian Crossing**: TO warn motorists of the Pedestrian Crossing facility ahead, these signs are put 10-15mts before the crossings.
-



Size : 900mm Each Side

Color :
Background : White
Border : Red
Symbol / Text : Black

5. **Common Lane for Cyclists and MV:** To warn motorists of the cycle users, wherever the cycle track is painted and not segregated.



Size : 900mm Each Side

Color :

Background	: White
Border	: Red
Symbol / Text	: Black

New Signs⁷

6. **Merging Traffic:** Used to warn the motorised vehicle users of the merging traffic, at locations like the foot of the flyover.



Size : 900mm Each Side

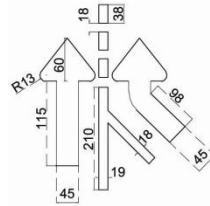
⁷ Signages not mentioned in IRC 67-2001, introduced as per urban road usage requirements.

Color :

Background : White

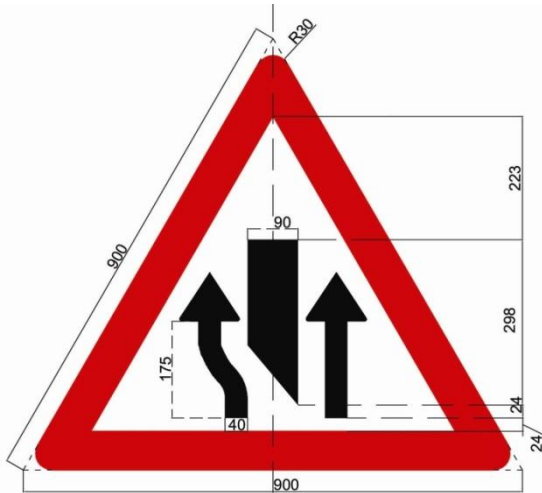
Border : Red

Symbol / Text : Black



7. **Bus Lane Split:** At more than one bus shelter locations, this sign is used before the bus shelters, to indicate bus lane splitting

into two or more lanes.



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Curve Signs Right /Left



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Right / Left Hair Pin Bend



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Right / Left Reverses Bend



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Steep Ascent / Steep Descent



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Narrow Bridge



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Narrow Road



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Road Widens



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Gap in Median



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Slippery Road



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Loose Gravel



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Cycle Crossing



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Pedestrian Crossing



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

School



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Cattle



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Men at Work



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Falling Rocks



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Ferry



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Cross Road



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Side Road Right / Left



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

T-Inter-section



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Y-Inter-section



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Staggered Inter-section



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Major Road



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Roundabout



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Dangerous Dip



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Rumble Strip



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Barrier



Size : 900mm Each Side

Color :

Background : White

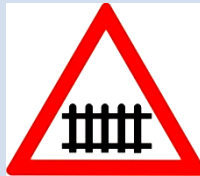
Border : Red

Symbol / Text : Black

Unguarded Railway Crossing



Guarded Railway Crossing



Speed Breaker



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Traffic Signals



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Runway



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

End of Dual Carriageway



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Start of Dual Carriageway



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Series of Bends



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Traffic Diversion on Dual Carriageway



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Overhead Cable



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Quay Side or River Bank



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Two Way Operation



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Lane Closures



Sudden Side Winds



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Reduced Carriageway



Rough Road



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Dangerous Ditch



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Slippery Road because of Ice



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Danger Warning Sign



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Queues Likely Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Opening or Swing Bridge



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Accompanied Horses and Ponies likely to be on road ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Wild Animals likely to be on road ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Deaf Persons Likely to cross on Road Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Blind Persons Likely on Road Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Fast Traffic Highway Only



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Merging Traffic Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Warning on Two way traffic on Cross Road Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Warning on Tunnel Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Cycle Route Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Warning for 'Pedestrian on Road Ahead'



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Warning to Motorists on Possibility of Old People Crossing Road Ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Accident Prone Area



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Priority Road Sign



Size : 900mm Each Side

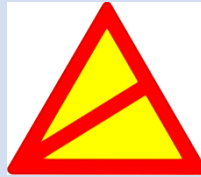
Color :

Background : White

Border : Red

Symbol / Text : Black

End of Priority Road Sign



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Build Up Area



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

End of Build Up Area



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Play Ground



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Risk of Flooding



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Trams Crossing



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

270 Degree Loop



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

Give way to Buses exiting Bus way ahead



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

End of Road Works



Size : 900mm Each Side

Color :

Background : White

Border : Red

Symbol / Text : Black

3.3. INFORMATORY SIGNAGES:

To inform the road users of routes, important destinations, cities, etc.

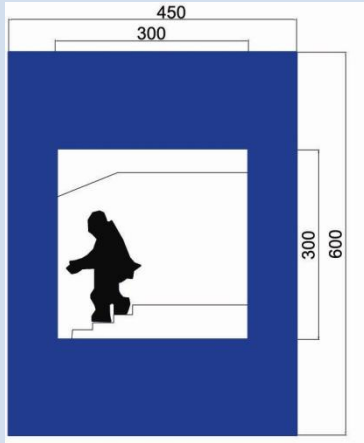
Shape & color: The signs shall be in shape of square or rectangle with a blue background and white legend, symbols and border or white background and black legend, symbols and border.

Table 3-4 Information Signages

S. No.	Title	Specifications
A	At BRT Corridor	Signages illustrated in the table below have been used on the corridor as Informatory Signages. Their purpose has been mentioned alongwith.

Signs from Code of Practice for Road Signages, IRC: 67-2001

1. **Pedestrian Subway**: Used before the subways, to inform pedestrians of the access ahead.



Size : 450mm x 600mm

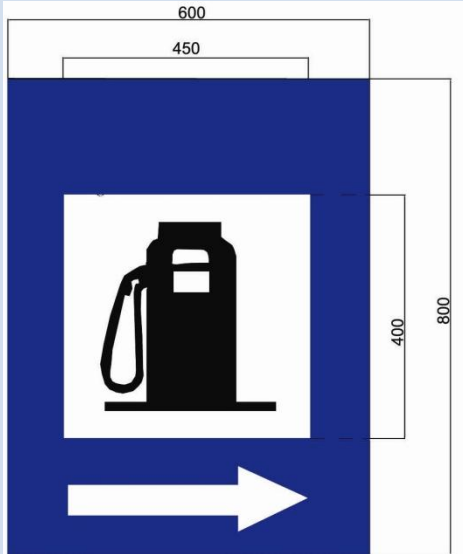
Color :

Background : White

Border : Blue

Symbol / Text : Black

2. **Petrol Pump**: Located at the petrol pump facilities.



Size : 600mm x 800mm

Color :

Background : White

Border : Blue

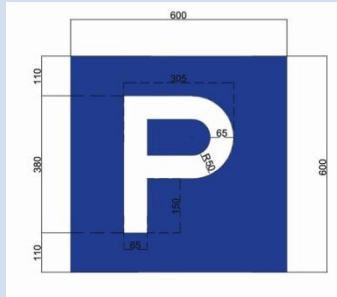
Symbol / Text :

Top: Black

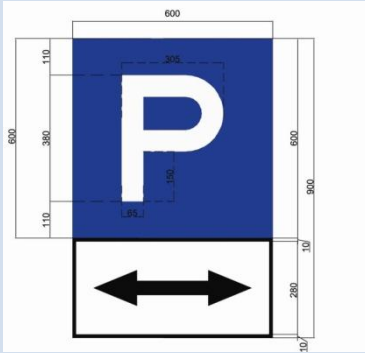
Bottom: White

3. **Parking:** Located at parking areas in the service lanes.

A.



B.



C.



D.



Size :	Color :
A. : 600mm x 600mm	Symbol / Text : White
B. : 600mm x 900mm	Top: Blue
C. : 600mm x 900mm	Bottom: White
D. : 600mm x 900mm	Border :-
	Top: Blue
	Bottom: White
	Symbol / Text :-
	Top: Blue

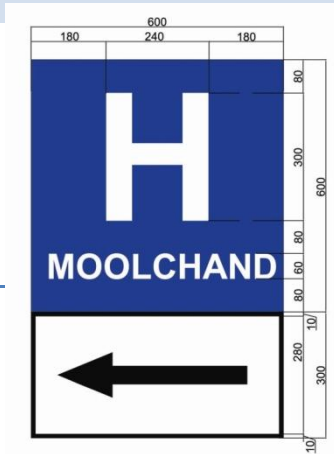


Bottom: White

Figure C and Figure D, follow specifications as Figure B.

Modified Signs from Code of Practice for Road Signages, IRC: 67-2001⁸

4. **Hospital:** Located before the hospital facility, direction indicated with an arrow.



Size : 600mm x 900mm

⁸ Signages from IRC:67-2001, modified as per urban road usage by taking references from MUTCD for Streets and Highways 2003 Edition, TCRP Report 12

Color :

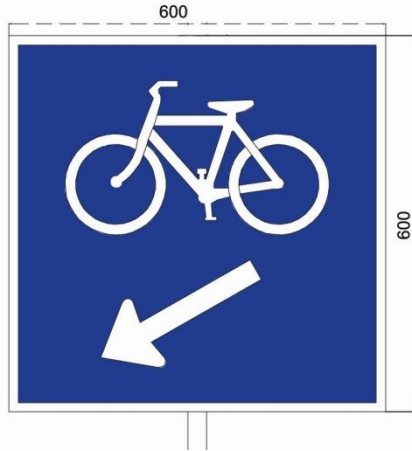
Background :
Top: Blue
Bottom: White

Border :
Black(Bottom)

Symbol / Text :
Top: White
Bottom: Black

This sign has been simplified and international symbol 'H' has been used to indicate hospital along with the name and arrow below.

5. **NMV Track**: Indicating segregated cycle track.



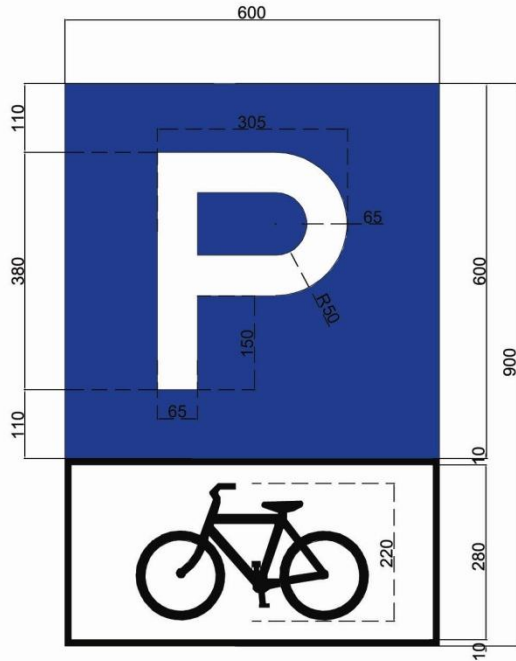
Size : 600mm x 600mm

Color :

Background	: Blue
Border	: White
Symbol / Text	: White

The cycle symbol has been simplified. This sign can be used as a regulatory sign for the motorists by adding a 'No-Entry' sign above the cycle track sign.

6. **NMV Parking**: Located at cycle parking areas.



Size : 600mm 900mm

Color :

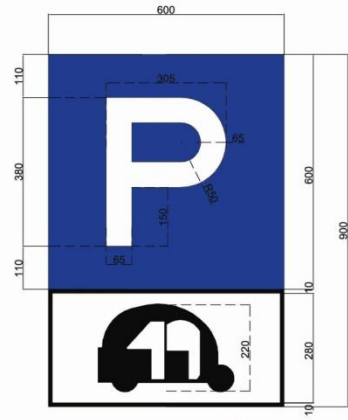
Background :
Top: Blue
Bottom: White

Border :
Black(Bottom)
Symbol / Text :
Top: White
Bottom: Black

The detached board (in IRC) is made a part of the sign and made into one sign of 600mm x 900mm. Cycle symbol simplified.

7. **TSR Parking:** Used to indicate auto rickshaw parking areas.

Size : 600mm 900mm



Color :
Background :
Top: Blue
Bottom: White
Border :
Black(Bottom)
Symbol / Text :
Top: White
Bottom: Black

The detached board (in IRC) is made part of the sign and made into one sign of 600mm x 900mm. Auto rickshaw symbol simplified.

New Signs⁹

8. **Common Cycle Track and Footpath:** Used at locations where pedestrians and cyclists share the road



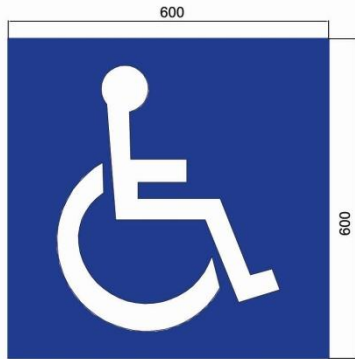
Size : 600mm x 900mm

Color :

Background	: Blue
Border	: White
Symbol / Text	: White

⁹ Signages not mentioned in IRC 67-2001, introduced as per urban road usage requirements.

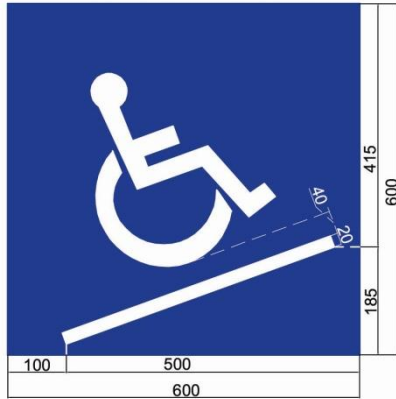
9. **Differently-Abled Environment**: Indicated at locations which have wheelchair access and are accessible by the differently-abled.



Size : 600mm x 600mm

Color :
Background : Blue
Symbol / Text : White

10. **Ramps**: Used to indicate locations of ramps at the subways and/or foot-over bridges, which are accessible by the differently-abled.



Size : 600mm x 600mm

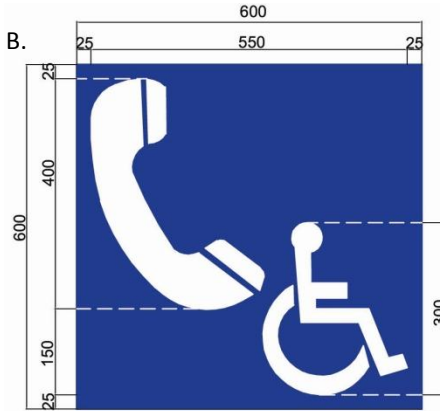
Color :
Background : Blue
Symbol / Text : White

11. **Public Telephones:** Used to indicate locations of public telephones, which are accessible by the differently-abled. The size of the board can be chosen from the options indicated below on the basis of usage.

A.



B.



Size :-
Left : 600mm x 600mm
Right: 600mm x 900mm

Color :
Background : Blue
Symbol / Text : White

13. **Public Toilets**: Used at public Toilets accessible to different-abled, arrows can be used to indicate directions, as illustrated.

A.

B.



Size :-

Left : 600mm x 600mm

Right: 600mm x 600mm

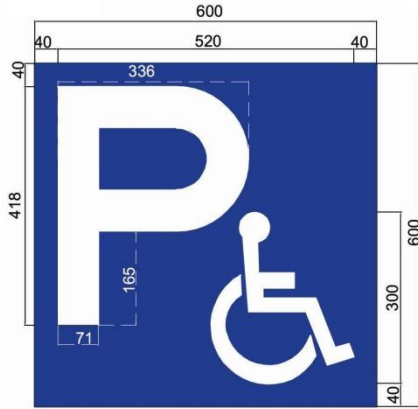
Color :

Background : Blue

Border (Fig B.) : White(Bottom)

Symbol / Text : White

12. **Parking for Differently-Abled: To indicate the demarcated parking space for the differently-abled persons. Below examples of the same sign-board with different sizes and additional arrows for direction, have been illustrated.**



Size :-

A : 600mm x 900mm

B : 600mm x 600mm

C : 600mm x 900mm

D : 600mm x 900mm

E : 600mm x 900mm

Color :

Border : Black (Bottom)

Symbol / Text :

Top: White

Bottom: Black

Symbol / Text : White

INFORMATION SIGNS

Direction and Place Identification signs

Advance Direction / Destination Sign



Map Type Advance Direction Sign



Advance Direction Sign On Rotary Inter-Section



Direction Sign



Reassurance sign or route confirmatory sign



Place / City identification



Truck lay Bye



Toll Booth Ahead



Weighbridge Ahead



Facility Information Signs

Public Telephone



Filling Station



Hospital (without Accident & Emergency Services) / (with Accident & Emergency Services)



First aid post



Eating place



Light refreshment



Resting place



Other Useful Information Signs

No through road



No through side road



U-turn Ahead



Informatory sign for pedestrian

Pedestrian subway



Pedestrian Crossings



Run Way/Airport



Repair facilities



Police station



Railway station
Metro Station/ Monorail
station



Contra flow bus lane



Bus lane



Bus stop



Taxi stand



Auto-rickshaw stand



Cycle-rickshaw stand



Parking Allowed on Foot Path



Parking Not Allowed on Foot Path



Parking Allowed on Half of Foot Path



Parking Not Allowed on Half
Foot Path



Park & Ride Information



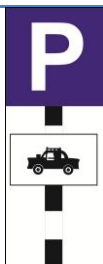
Parking Restrictions Signs for
Traffic Management



Cycle Parking



Taxi Parking



Auto Rickshaw Parking



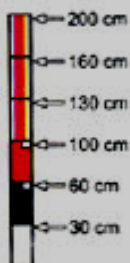
Scooter & Motorcycle Parking



Cycle Rickshaw Parking



Flood Gauge



Country Border



National Heritage



Toilet



Chair Lift



Route Recommend for Paddle Cycles in Mixed Carriageway



Cycle lane



Contra Flow Cycle Lane



Toll Road Ahead



Camera Installed For Traffic Regulations



Home Zone



Workshop Ahead



Industrial Area



Camp Site



Holiday Chalets



Picnic Site



Golf Course



Chevron Sign



Emergency Exit Pedestrians In Tunnel



Disabled signs

The International Symbol of Accessibility



Disable Parking Information



Parking Areas



Ramped Entrance To Subway/Over Bridge



Facilities Like Telephone



Facilities Like Toilets



Way Finding



National Highway Route
Marking Sign



State Highway Route Marking
Sign



DEFINITION PLATES





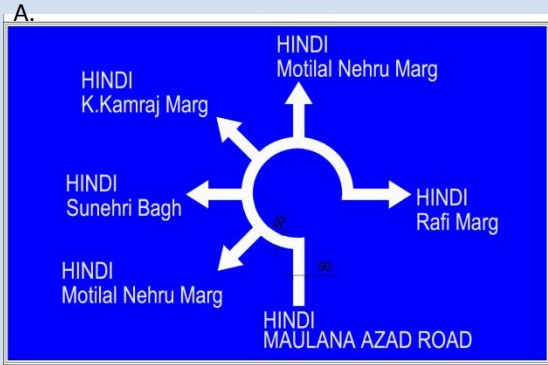
13. For Adjoining Roads: These signs are located at the junctions, on the gantry to indicate the adjoining roads and connecting roads.



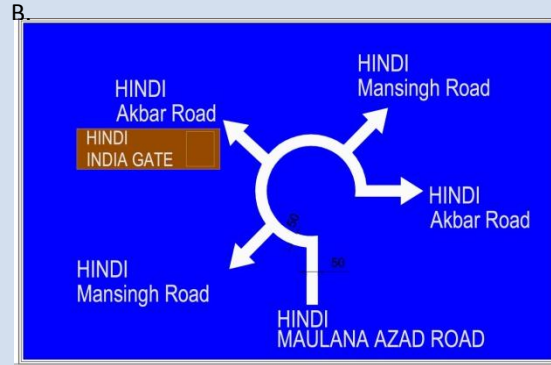
Size : 3000mm x 400mm

Color :
Background : Blue
Border : White(Bottom)
Symbol / Text : White

14. Roundabouts: Used at roundabouts to indicate number of roads and the destinations they lead to. Important/Heritage Landmarks are indicated using brown background color, refer Figure B.



Size : 3000mm x 400mm



Color :
Border : White
Symbol / Text : White

15. Destination Signages: Mounted on the gantries, these signs indicate the main landmark destinations.

Size : 3600mm x 3000mm

Color :

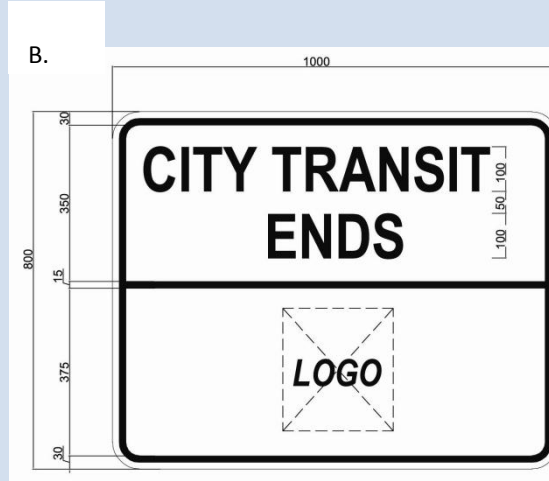
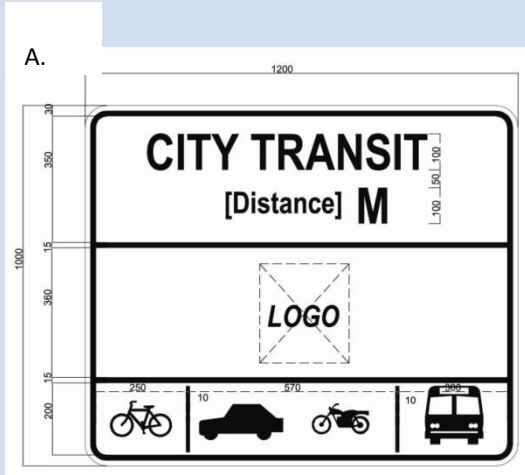
Background : Blue

Border : White(25mm)

Symbol / Text : White

Letter Size : 300mm

16. Approaching/ Exiting BRT Corridor: Used on side roads to indicate approaching and exiting BRTS Corridor, refer *Figure-A and Figure-B* respectively. These signs should be put every 500mts. Also indicates buses, motorists and cyclists to follow their dedicated lanes.



Size : 3000mm x 400mm

Color :

Border : Black

Symbol / Text :

Top: Black

Bottom: Black

Border : Black

Symbol / Text : Black

Size of the operating agency Logo as per the design.

Table 3-5 Route Maps and other Signages

S. No.	Title	Specifications
B	At Facility	
1.	Bus Shelter	Signages under this category are used at/near the Bus Shelter. These signages serve the

purpose of providing passenger information like the location, neighbouring areas and route details to the Bus Commuters and direction information for the respective shelters to the buses.

- A Way finding Information Board
- These Signs are used at the entry/ exit locations of the shelter. These give information about the neighbouring locations of the shelter and exit and entry directions. The information is delivered using English and National/ Local languages. However along with the above information, the name of the Shelter could also be added, provided there is enough space and 2400mm of clear height is achieved. Refer *Figure 122 and Figure 123*.



Figure 3-1 – Exit Sign at the Bus Shelter



Figure 3-2 – Sign at the Bus Shelter Entrance

Location: Installed at the Entry/ Exit areas of the shelter.

Size: 1250mm x 200mm

Clear height: 2400mm

Color:

Background: White

Border: Black

Symbol: Text and Arrows in Black

Text Size: Depending on the size of the board letter height can range from 35mm to 50mm, as per information hierarchy.

Status: New

B Direction for Buses
before Shelter

In case of more than one shelter the bus lane splits and to guide buses to their respective shelters directional signages are used.

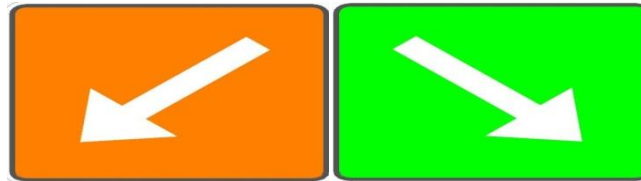


Figure 3-3 – Directing Buses to their respective shelters

Location: Installed in the unpaved area, where the bus lane splits w.r.t. the number of shelters.

Size: 450mm x 450mm

Color: Background: Orange and Green in case of BRT. Color coding as per the colors assigned for the shelters. Use of contrasting and distinctive colors is preferable.

Border: Black

Symbol: Arrows in White.

Status: New:

C.	Route Information	Bus commuters should be able to access the route information details before and at the bus shelter. This system of information should be accessible to all. Below are three types of Information Boards/ Signages installed at and near the bus shelter.
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1	Route Maps	<p>The Route Maps should be installed before the commuter enters the shelter and at the time of changing routes, so he/she can plan the journey accordingly, for example: on the Junctions and inside the Shelters. It should be designed with minimum elements which are easily read. <i>Figure 6-12 and Figure 6-12a</i>, are examples of route map for parallel shelters. It should have the following components:</p> <p>Origin and Destination: A commuter should be able to identify the location he/she is presently at, and also the destination by looking at the route map.</p> <p>Optional Route Numbers from the respective shelters: Each Shelter should have route maps which give information of routes from or via the shelter. In case of parallel shelters, although it will be helpful to the commuter to provide information of all the routes happening at the intersection, it can become chaotic overwhelming the route map with a lot of information.</p> <p>Bus Routes from each shelter: It should deliver the information regarding the routes of the buses, their expected stoppages and terminating locations.</p> <p>Color coding of the route maps can help, in case of more than one shelter: For parallel shelters, using a color code in the route maps can be helpful as it would make, identifying the respective shelters easier.</p> <p>Differently-Abled Friendly: Preferred to have information in Braille and in form of audible messages. Installation of Braille plate should at a height of 1200mm to 1400mmas per International standards.</p> <p>Legend: It should have a legend defining all the components/elements/symbols of the route map.</p>
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2

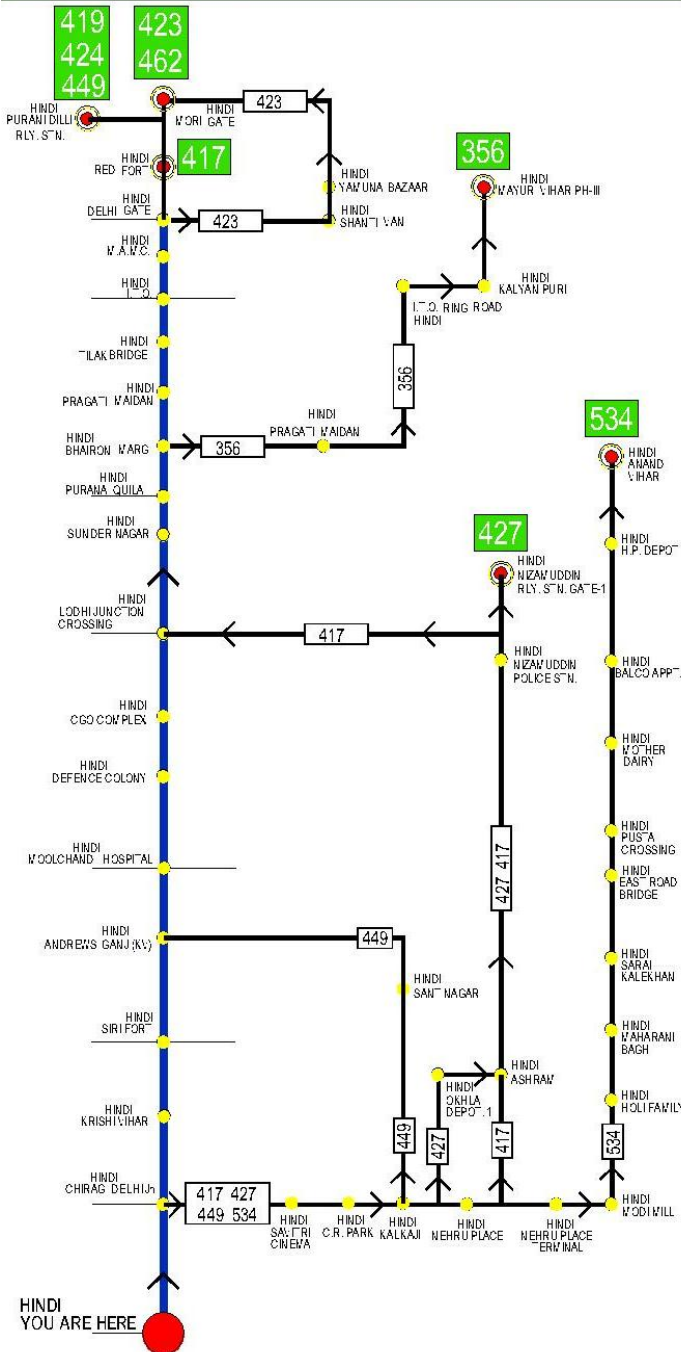
NORTH

HINDI HINDI DELHI TRANSIT

DR. AMBEDKAR NAGAR - DELHI GATE

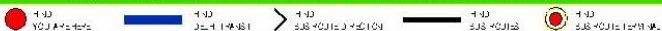


ages | 2012



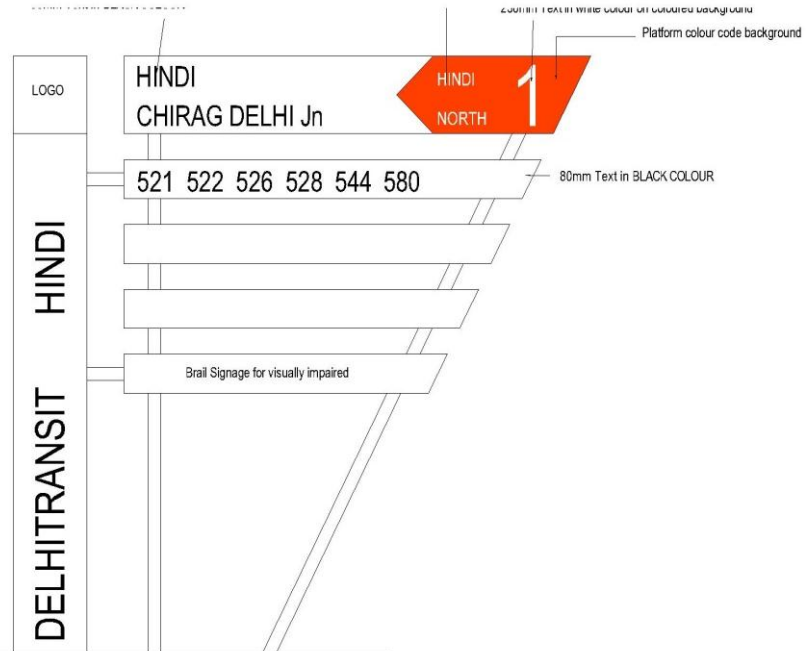
– Route Map at North-1
Bus Shelter, Delhi BRT

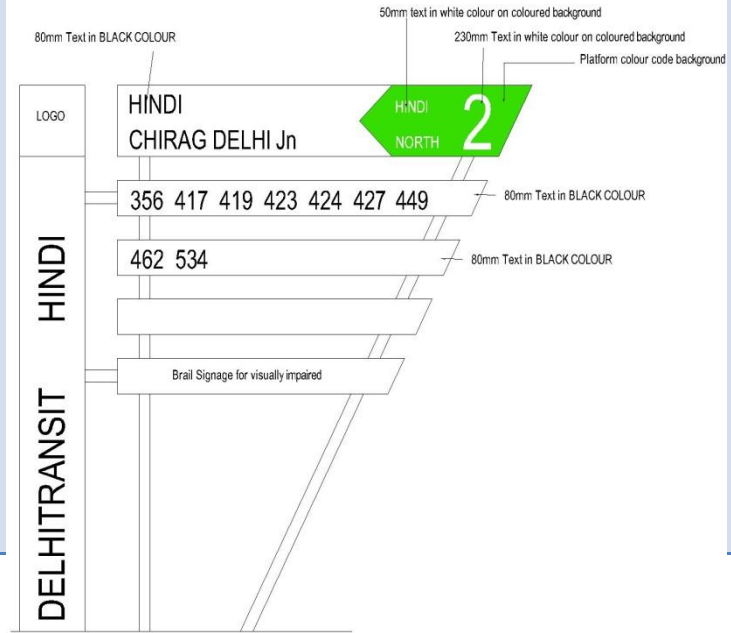
HINDI SHEIKH SARAI PH-2
356 417 419 423 424 427 449 462 534



C2.	Information Board at the Shelter	<p>Located at the entrance of the Shelter. It has the following features:</p> <p>Routing Information: Bus Numbers w.r.t. the bus routes, and with reference to the Shelters passengers will be boarding/alighting[For parallel Bus shelters]. Refer <i>Figure 6-14a and Figure 6-14b</i> for parallel bus shelters.</p> <p>Differently-Abled Friendly- Preferred to have information in Braille and in form of audible messages. Installation of the Braille plate should be placed where it can be read by wheelchair users with vision impairment, as the height of wheel chair is 1200mm. Letter height and size should be such that it is readable from the maximum expected distance. Re</p>
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Figure 3-14a – Information Board for North-1 Shelter, BRT Delhi





2. At Junction
- Signages under this category are used near the Bus Shelter, at the junction. These signages serve the purpose of providing passenger information like the route numbers, along with a route map, before the commuters reach the shelter. Comprehensive differently-abled system of information at every pedestrian crossing location of the junctions, assisting commuters with the bus routes should be provided at the junctions, if there are space constrains then atleast information regarding the route numbers must be provided before the commuters move towards the shelter. Two examples of such signboards have been illustrated below, refer *Figure 6-16a and Figure 6-16b*, for the same.

Bus Route Information Board

It delivers limited information about the direction specific(North Bound/South Bound) bus route numbers at each shelter, in case of more than one shelter with the name of the junction. Making such kind of information board is less expensive, but it does not provide route details and is not differently-abled friendly.

HINDI	DELHI TRANSIT
HINDI CHIRAG DELHI JN - NORTH	
521 522 526 528 544 580	1
356 417 419 423 424 427 449 462 534	2

a – For North Bound Shelter, BRT Delhi

HINDI	DELHI TRANSIT
HINDI CHIRGA DELHI JN - SOUTH	
423 424 490 521 526 541 544 580 984	1
356 419 462 522 528	2

b – South Bound Shelter, BRT Delhi

B.	Comprehensive Bus Route Information Board	<p>It is a comprehensive system of passenger information and is accessibility enabled. Route details of the respective bus shelters has been clubbed together and presented. Refer <i>Figure 6-17</i>, example of comprehensive bus route system used at junctions in BRT Delhi. It could contain the following information:</p> <ul style="list-style-type: none">Name of the junctionOperating agency logo to be incorporated.Direction to the nearest neighbouring areasFor more than one shelter on the junction, direction to Shelter-1& 2 of both the North and South bound SheltersRoute Numbers for all North and South Bound SheltersRoute maps comprehensively put together of all North and South Bound SheltersRoute details in Braille and/or auditory systems. Information could also be provided using electronic systems or by pamphlets.Advertisement space <p>While designing a comprehensive information system, the following guidelines need to be followed:</p> <ul style="list-style-type: none">Differently-Abled Friendly -Use of guiding blocks(tactiles) and contrasting color arrangement for people with vision impairment or limited vision
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Installation of information in Braille and audible signages. Installation of the Braille plate should be placed where it can be read by wheelchair users with vision impairment, as the height of wheel chair is 1200mm.

Obstacle free sufficient walking space

Information should be provided in English and Local/National language

Letter Size and Font: Letter size is taken according to the maximum distance from where it shall be read. Signs should be in contrasting colors and preferable be embossed in distinct relief to allow visually impaired persons to access the information by touching the board.

Clear Heights and distances: Signages, like Braille plates, for the differently-abled should be located at distances and heights where they are easily accessible..

To lead commuters to the shelters, in case of direction specific system, flexible/pivoted arrows could be used, so that direction can be indicated regardless of the location of the Information Board.

It should be efficiently lit providing readability at night.

Source

Signages for the BRT have been taken from the IRC, however it was noticed that it does not cover all signages, hence other International Codes and Standards were also referred. The Signages not from IRC are either modified or designed new on the basis of the mentioned standards, these have been referred to as 'NEW' or 'MOD' in the tables explaining Signages.

Taken from Indian Road Congress (I.R.C.): 67-2001 (Code Practice For Road Signs)

Modified from Indian Road Congress (I.R.C): 67-2001 (Code Practice For Road Signs)

New signs introduced with reference to international standards

United Kingdom standards for signage.

MUTCD – Manual on Uniform Traffic Control Devices, 2003 edition (standard followed by United States)
