#### CONSTRUCTIONAL FEATURES OF ICF COACH



# SHELL DESIGN

- Light weight integral design
- Hollow girders from the point of view of strength and utilization of material
- Reduction in tare weight by utilizing stressed skin concept and by use of low alloy fittings



# SHELL DESIGN

- Corrugated sheets for the trough floor to form part of the tubular construction and to absorb buffing forces
- Trough floor is provided between the sole bars and running over the length between the head stocks of the under frame
- Below the lavatory tubular construction is provided in place of trough floor to avoid corrosion because of seepage of water.



- Anti-telescopic structure at the end walls to avoid telescoping of adjacent coaches and to absorb major part of the collision energy
- Shell is made of frame work of series of hoops, consisting of floor cross beams, body side pillars and roof carlines located transversely.



- These hoops are connected by sole bars, waist rails, light rails, cant rails and carlines longitudinally
- Frame work is sheathed all over by 2mm thick corten steel on the side walls and 1.6mm thick corten steel sheet on the roof.
- Under frame acts as support for mounting equipment like brake cylinders, DV, BP & FP pipes, auxiliary reservoirs, control reservoirs, etc. Air conditioning equipment, battery boxes, under slung water tank, etc.

#### **DIMENSIONS**

# END BODY

- Consists of four vertical pillars of box section
- Vertical pillars are connected transversely by 'Z' sections
- Vertical pillars are welded to the head stock at the bottom and to the roof at the top.



# END BODY

 The head stock consists of outer and inner head stocks connected by two rigid center buffer stiffeners, which transmits all the buffing forces to the under frame structure.



END CONSTRUCTION OF BROAD GAUGE ALL METAL LIGHT WEIGHT. COACH ICF.

### **ICF COACH SHELL**



#### **COACH OVERALL DIMENSIONS**



#### **COACH SHELL**

COACHES	OVER BUFFERS	OVER BODY	OVERALL WIDTH	HEIGHT FROM RAIL LEVEL
ICF/RCF	22296	21337	3245	4025
BEML	22296	21336	3250	3991
IRS	21996	21030	3251	3886