

# NEWS LETTER

## January to March 2021

### FDPs/WORKSHOPS/SEMINARS CONDUCTED

Webinar No 1: Recent trends in Civil Engineering Industry

Date: 20<sup>th</sup> March 2021

Resource Person: Mr. R Balaji



**Vel Tech High Tech**  
Dr. Rangarajan Dr. Sakunthala Engineering College  
(An Autonomous Institution)  
Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

**Department of Civil Engineering  
&  
Institution's Innovation Council (IIC)**

**INSTITUTION'S  
INNOVATION  
COUNCIL**  
MAKING EDUCATION  
A BETTER EXPERIENCE

jointly presents  
**Online Webinar  
on  
Recent Trends in Civil Engineering Industry**

**Date: 20.03.2021** **Time: 10.00 am – 11.00 am**

Resource Person

**Chief Patrons**  
Col. Prof. Dr. Vel. Shri. R. Rangarajan,  
Founder President and Chairman  
Dr. Sagunthala Rangarajan,  
Vice Chairman

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**Convenors**  
Dr. S. Govindasami,  
Dean (CE & ME)  
Dr. B. Bharathiraja,  
Professor, Dept. of Chemical Engg

**Co-ordinators**  
Mr. M. Manoj Kumar,  
Assistant Professor / Civil

**Mr. BALAJI. R**  
DGM, (Quality Assurance)  
M/S, Kamachi Industries Ltd.,  
Rolling Mill Division,  
Gummidipoondi

**Join through**  
<https://zoom.us/j/5616014885?pwd=dzFyWDQ4eEQ0SDhpdVZSM3F0bzEwdz09>  
Meeting ID: 5616014885  
Password: manoj

**No Registration Fee**  
Certificates will be provided to  
all participants

**In Association with**

**ADDRESS FOR COMMUNICATION**  
The Coordinator,  
Department of Civil Engineering,  
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The Department of civil Engineering conducted a webinar on 20<sup>th</sup> March 2021 on the topic “Recent trends in Civil Engineering Industry” by Mr. R Balaji, Deputy General Manager, Quality Assurance, Kamachi industries Ltd.

He started the session with introduction to recent trends in Civil Engineering Industry. He explained on new methodologies in the field of design in Steel Structural Elements.

# MAGAZINE

## STUDENTS CORNER

### ARTICLE NO: 1

Student ID No: VH9391

Student Name: VINISH RAJAN.V

Year /semester: III/ V

Shear wall is a structural member used to resist lateral forces i.e parallel to the plane of the wall. For slender walls where the bending deformation is more Shear wall resists the loads due to **Cantilever Action** and for short walls where the shear deformation is more it resists the loads due to **Truss Action**. These walls are more important in seismically active zones because during earthquakes shear forces on the structure increases. Shear walls should have more strength and stiffness. When a building has a story without shear walls, or with poorly placed shear walls, it is known as a soft story building. Shear walls provide adequate strength and stiffness to control lateral displacements. Shear walls perform dual action that is they act as lateral as well as gravity load-bearing elements.

#### Concrete Shear Wall:

Concrete Shear Wall Concrete Shear wall buildings are usually regular in plan and in elevation. Shear wall buildings are commonly used for residential purposes and can house from 100 to 500 persons per building. Horizontal and vertical distributed reinforcement (ratio 0.25%) is required for all shear walls.

#### Strength of Shear Walls:

The strength of a wall system depends on many factors including the strength of the sheathing; the type, size, and spacing of the fasteners; the panel aspect ratio (ratio of long to short dimension of shear panel); and the strength of the studs. Because of these variables, the design strength of shear walls is usually based on tests of full height specimens. Shear walls that are perforated with openings are called coupled walls. These walls act as isolated cantilevered walls connected by coupling beams (also called spandrel beams or lintels) designed for bending and shear effects.