

**GOVERNMENT POLYTECHNIC FOR GIRL'S**

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## **Demolition of building**

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# Introduction



- Demolition is the process of tearing down or falling down of a building after its life period with the help of some equipments or any other method.

# DEMOLITION



# WHY DEMOLITION ?



- The structure which have already passed their design life need to be reconstructed ,for safety and operational requirements.
- The old structures need to be demolished by manual methods but machinery and advanced techniques are required for demolition of bigger structures.



# **STEPS BEFORE DEMOLITION**

- Surveying
- Removal of hazardous materials
- Preparation of plan

# SURVEYING



- Study of different parameters of the structure and its Surroundings.
- ✓ Record drawings
- ✓ The construction materials
- ✓ Site Condition
- ✓ Site area of demolition

# REMOVAL OF HAZARDOUS MATERIALS

- ✓ asbestos containing materials,
- ✓ petroleum
- ✓ Soil Contamination Material





# PREPARATION OF PLAN

- The location of the building to be demolished;
- A detailed topography of the site;
- Time and Frequency
- A temporary parking layout for mobile machines and trucks.



# METHOD OF DEMOLITION

- Non explosive demolition
- Explosive demolition





## NON EXPLOSIVE METHOD

- Sledge hammer
- Excavators and Bulldozers
- Wrecking balls
- High reach excavators

# Sledge hammer

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- Used for removing a stone wall or a single column.
- But cannot be used for removal of large buildings.

## Excavators and Bulldozers



- Used to topple one-or two-story buildings are demolise.
- speedy demolish of building in this machine compare to hammer.

# WREAKING BALL



- In case of buildings have greater heights (5 to 6 story) normal excavators and bulldozers are not sufficient.
- This method is more effective only for high rise masonry structures because of the uncontrolled backward movement of steel ball after the impact on the wall surface
- This machine is not commonly used.

# HIGH REACH EXCAVATORS



- High reach excavators are more often used for tall building demolition.
- These excavators are used to demolish up to a height of 300 feet.

# EXPLOSIVE DEMOLITION

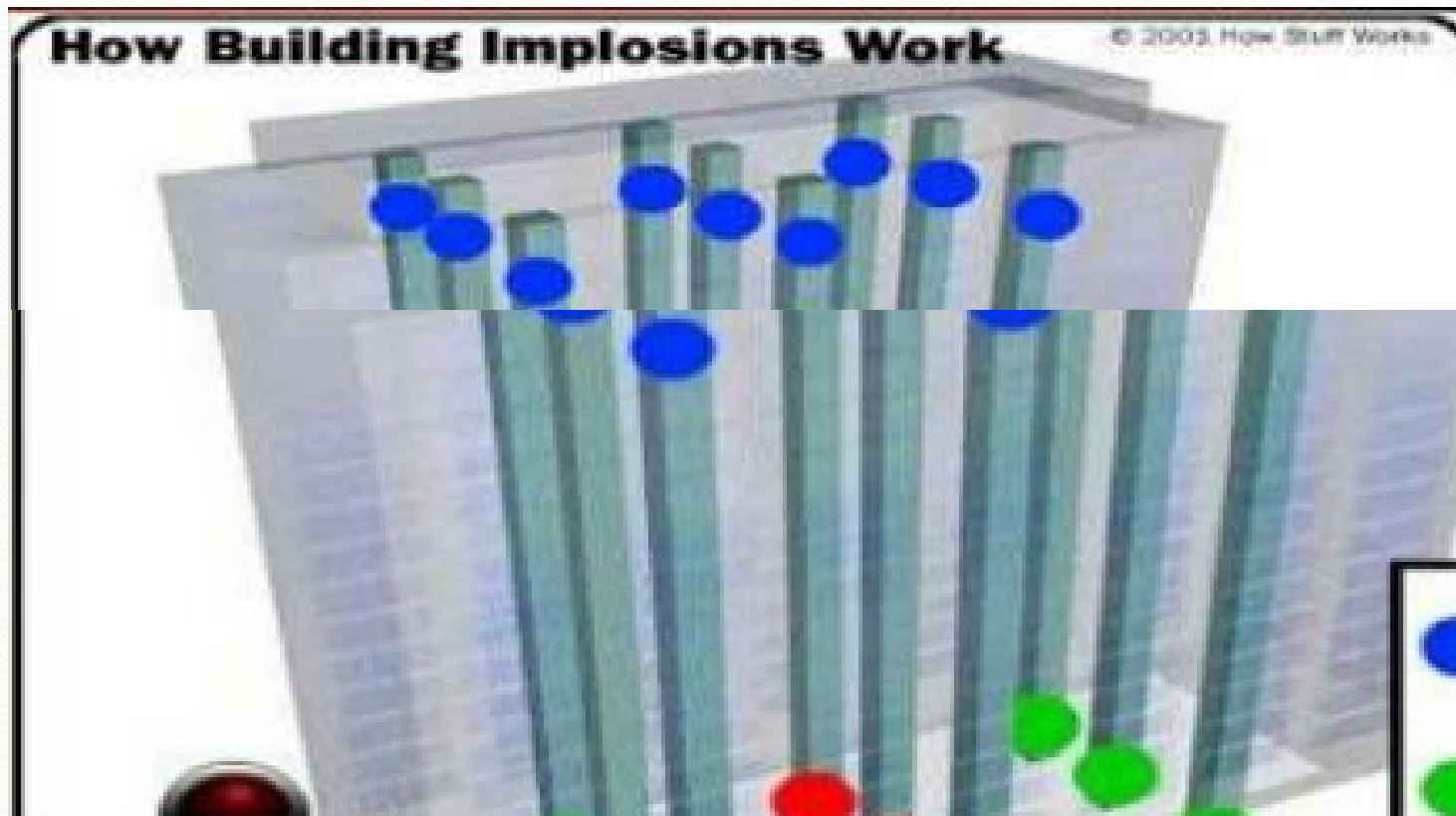


Blasting machine



Blasting cap or electrical detonator

# HOW BUILDING IMPLOSION WORKS?





# EMERGENCY EXIT



- Properly protected
- Free of obstruction
- Properly marked with exit sign



Thank you

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