



# aggregate uses



**Sand, Gravel, and Crushed Stone (“Aggregates”) are Essential for Making Cement, Concrete, and Asphalt, the Basic Building Blocks of Our Buildings and Roads**

**fast facts:**

**Twice as Much Concrete is Used Worldwide than all Other Building Materials Combined!<sup>1</sup>**

## What is the Difference Between Cement, Concrete, and Asphalt?

### Cement:

A fine powder made by combining limestone and other minerals, which then becomes the “glue” in making concrete.

### Concrete:

Made by combining cement, water, sand and gravel.

### Asphalt:

Asphalt pavement is approximately 95% aggregates, and 5% asphalt cement as a binder. The binder is a product of oil refining that acts to “glue” the aggregates together.

## Aggregates are Used in Thousands of Everyday Applications:

### Infrastructure

- Highways
- Bridges
- Roads
- Streets
- Homes
- Schools
- Hospitals
- Shopping Centers
- Airports
- Railroads
- Rapid Transit
- Ports
- Tunnels
- Dams
- Commercial and Government Buildings
- Sewer Systems
- Water Purification and Sewage Treatment

### Playing Fields

- Golf Courses
- Sidewalks

### Environmental Protection

- Soil erosion control programs along rivers and shorelines
- Reduction of sulfur dioxide emissions generated by electric power plants
- Beach replenishment
- Water storage
- Spawning beds
- Flood control
- Groundwater replenishment
- Recycling

### Agriculture

- Agricultural Crops
- Remineralization of soils in agriculture and forests for healthy soil and growth

### Homes and Buildings

*Much of our homes and buildings are made up of aggregates or of items that include aggregates:*

- Carpet Backing
- Fireplace
- Bricks
- Foundation
- Toilets, Sinks and Bathtubs
- Windows
- Roofing Tiles and Shingles
- Plaster
- Wallboard
- Glass
- Marble
- Sandstone
- Granite
- Insulation
- Concrete Pipes
- Paving Stones

## CALCIMA

California Construction and Industrial Materials Association

1029 J Street, Ste. 420  
Sacramento, CA 95814  
Phone: 916 554-1000  
Fax: 916 554-1042  
www.calcima.org  
www.distancematters.org

<sup>1</sup> Cement Association of Canada