





**Introduction :**

In the large outcrop of metamorphic rocks in Figure below, the rocks' platy appearance is a result of the process metamorphism. Metamorphism is the addition of heat and/or pressure to existing rocks, which causes them to change physically and/or chemically so that they become a new rock. Metamorphic rocks may change so much that they may not resemble the original rock.



## Uses of Metamorphic Rocks

Quartzite and marble are commonly **used** for building materials and artwork. Marble is beautiful for statues and decorative items such as vases (see an example in Figure below). Ground up marble is also a component of toothpaste, plastics, and paper.

Type Of Rock	Definition	Picture
<b>Gneiss</b>	Gneiss is made from granite that was pushed deep down into the earth, and became foliated.	
<b>Quartzite</b>	Quartzite is made from sandstone, and was pushed deep into the ground, and becomes quartzite, which is nonfoliated.	
<b>Slate</b>	Slate is made from shale, and was pushed deep into the ground, and becomes slate, which is foliated.	
<b>Marble</b>	Marble is made from limestone and was pushed deep into the ground, and becomes marble, which is nonfoliated.	

## Slate

If the sedimentary rock shale becomes buried under the surface of Earth and heated and pressured, it can turn into metamorphic slate. Slate varies in colour but is generally grey. It is water-resistant and when it splits, it breaks in straight lines with flat surface top and bottom.



Slate is a good roofing material, but people also use it for decorative gardening stones, as a base for snooker tables and it was used as a writing board (or writing slate) in the Victorian classroom.

## Marble

Marble is limestone that has undergone some changes. It is a hard crystalline rock and has many uses.



Around 22,000 tonnes of marble were used to build the Parthenon, an important temple in Ancient Greece. It is still used as a building and sculpture material today. Marble can even be ground down and used in soaps and cleaning products.

## Schist



Schist is formed from shale or mud but at a much higher temperature than slate. Schist is not a very strong rock, so it is not often used as a building material. However it can be used for garden decoration, paving and sometimes sculpture.

## Glossary

**Crystalline** - something that contains or is made from crystals

**Metamorphic** - something that involves a physical change

**Sculpture** - a three-dimensional art work

## Pakistan Building Codes

### 1. Building Code of Pakistan - Seismic Provisions-2007

S.R.O. for "Application for Building Code of Pakistan" dated September 10, 2008

### 2. Building Code of Pakistan- Energy Provisions-2011

S. R. O. 249 (I) for Building Code of Pakistan- Energy Provisions-2011

### 3. Pakistan Electric - Telecommunication Safety Code (PETSAC)-2014

S. R. O. 716 (I) for Pakistan Electric & Telecommunication Safety Code (PETSAC) 2014

S. R. O. 717 (I) for Pakistan Electric & Telecommunication Safety Code (PETSAC) 2014

### 4. Building Code of Pakistan- Fire Safety Provisions-2016

S. R. O. 1073 (1) for Fire Safety Provisions-2016

S.R.O. 1074 (1) for Fire Safety Provisions-2016

### National and Provincial Legislations on OHS

1. Pakistan Occupational Health and Safety Act 2018 (draft)

**2. Sindh Occupational Safety and Health Act, 2017**

3. Punjab Occupational Safety and Health Act, 2019

4. Pakistan Environmental Protection Act, 1997

5. The Mines Act, 1923

6. The Factories Act, 1934

