

Static and dynamic behaviour of Kuala Lumpur limestone

ABSTRACT

It is a well known fact that the local bedrock which acts as the foundation for many surficial structures plays a major role in establishing the damage potential of incoming seismic waves due to earthquakes. Seismic activities are definitely a geologic hazard for those living in regarded prone areas, but the seismic waves are invaluable for studying the interior of the Earth. To understand the influence of seismicity to rock behaviour we must first explore stress and strain of the subject rock. Malaysia is experiencing small-scale tremors due the local and neighboring seismic activities. Limestone, being the major portion of the underlying bedrock in Kuala Lumpur, will experience dynamic behaviour due to these activities. To foresee the dynamic behaviour, the static behaviour of rocks is being considered. However, the static and dynamic behaviour of rock corresponds to the rock lithology, physical and mechanical properties of the rock. This paper reviews the properties of Kuala Lumpur limestone and foresees the probable dynamic behaviour of the rock.

Keyword: Dynamic; Earthquake; Limestone; Seismic; Surficial structures