



NCEEA

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A collaboration between
NTU School of Civil & Environmental Engineering Alumni Association
NTU Asian School of the Environment Alumni Association

NCEEA Webinar Registration

Application of Geogrid in Civil Engineering Projects in Singapore

17 June 2020 (Wed) at 11.00 am

Speaker

Er David Ng



Er David Ng is a Professional Engineer (Civil) and Specialist Professional Engineer (Geotechnical) in Singapore. He has been involved in publication of more than 70 technical papers in field of geotechnical and environmental engineering. He has more than 20 years of experience in management, planning, design and construction of major building and infrastructure projects, for temporary and permanent works in Singapore, Malaysia and India. He is co-founder of One Smart Engineering Pte Ltd

Short Introduction of webinar

Geogrid is made from high density polyethylene (HDPE) and it is developed for reinforcement and stabilization of ground structures. It is commonly used to construct steep slopes, retaining walls, bridge abutments, further to repair failed slopes and to construct geocell structures. Geogrids are manufactured using select grades of HDPE resins that resist elongation (creep) when subjected to high loads for long periods of time. These Geogrids carry large tensile loads applied in one direction (along the roll), and their open aperture structure interlocks with natural fill materials. Figure 1 shows the typical appearance of HDPE geogrid. One of PUB's drainage upgrading project at Sungei Tampines includes creating a soil bio engineering slope with use of geogrid. Soil Bio-engineering slope is the use of living plant materials to provide some engineering function such as acts as erosion control and it is an effective tool for treatment of a variety of unstable slope or sites. As we know, soils pull apart under tension, however, geogrids are strong in tension. As a result, the stability of soil bio engineering slope is able to enhance with the presence of geogrid. This Webinar will present the various application of geogrid in civil engineering projects.

Slides presentation

Q&A