Strategic thinking & Strategic

Rangatiratanga

Kāhore parakino

Our built environment is non-polluting

Tawhirimātea
Atua of winds
y tug, fiest all comfort
of, floods, & storms.

Tangaroa Hinemoana

Auadineocean

Tumatauenga

Atua of war, strategic

and creative thinking

Mauritanga

We recognise mauritanga, that each being, and entity has an essential lifeforce or vitality. This extends to inanimate objects, individuals, ecosystems and social groups in which this essence is located. With this knowledge, we appreciate that Ngākopa Construction 4.0 involves a complex relationship between peoples, land, materials, technologies and systems that have an inherent vitality. Our aim considers how the intersection between mātauranga Māori and western scientific methods and frameworks measures and reduces harm in the way we create built environments by protecting. maintaining or enhancing mauri to support long-term health and well-being.

Ranginui | Sky father

Wairuatanga

Wairuatanga, stresses the importance Maori place on maintaining an intimate genealogical connection to an interconnected family of atua associated with the natural environment. These atua influence how we build things to resist their destructive forces, (Tawhirimātea, Tangaroa, Mataoho), and to also help determine what materials or processes are best to use, to ensure their vitality and fundamental rights as taonga (treasures) and living entities is not compromised by our decision making in the way we design and manufacture built environments. By promoting an awaremess of how the different atua influence strategic decision making to develop better design and material systems to protect both them and us. Ngākopa Construction 4.0 mines relevant data drawn from Western science and mātauranga Māori to focus on ways to reduce harm to the many living entities associated with Māori atua and network of living and non-living things they support.

Design data, material data, manufacturing data. Life Cycle analysis, resistance to obsolescence, adaptive reuse, recyclability. Zero carbon, & restorative. Our built environments reduces emissions Mataoho Stabilisation, earthquake proofing structural Rūaumoko Our built environments reduces emis and removes toxins from degraded and removes toxins from degraded ecosystems, rivers, lakes, swamps. ecosystems, rivers, lakes, mountains or coastal areas. Atua of earthquakes stabilisation, eartinguake prooring structural elements, all inorganic materias extracted from the ground, fossi fuels, marale minerals orasual. Whatahaunanu Rongo ma Tane

Tane Mahuta
Atua of the forests

Organic materi

Kaitiakitanga

Tenga Legacy Ngākopa transformation of the Construction Industry 4.0 supports holistic decision-making and strategies to care and protect the environment by considering the interconnected relationship of Māori to their atua, kaitiakitanga, the responsibilities they might have to protect them, alongside interdependencies between various data sets aimed at reducing harm. The intension is to consider our intergenerational legacy.

Whakapapa

Papatūānuku | Earth mother

We recognise lineages connecting us to our tupuna (ancestors), including ngā ira atua. These connections include animate and inanimate objects, plants, animals, phenomena and ways of thinking. Our aim is to find the intersectionality where Ngakopa - Construction 4.0 approaches include descriptors and taxonomies to reflect whakapapa and acknowledge the origin of where things come from.