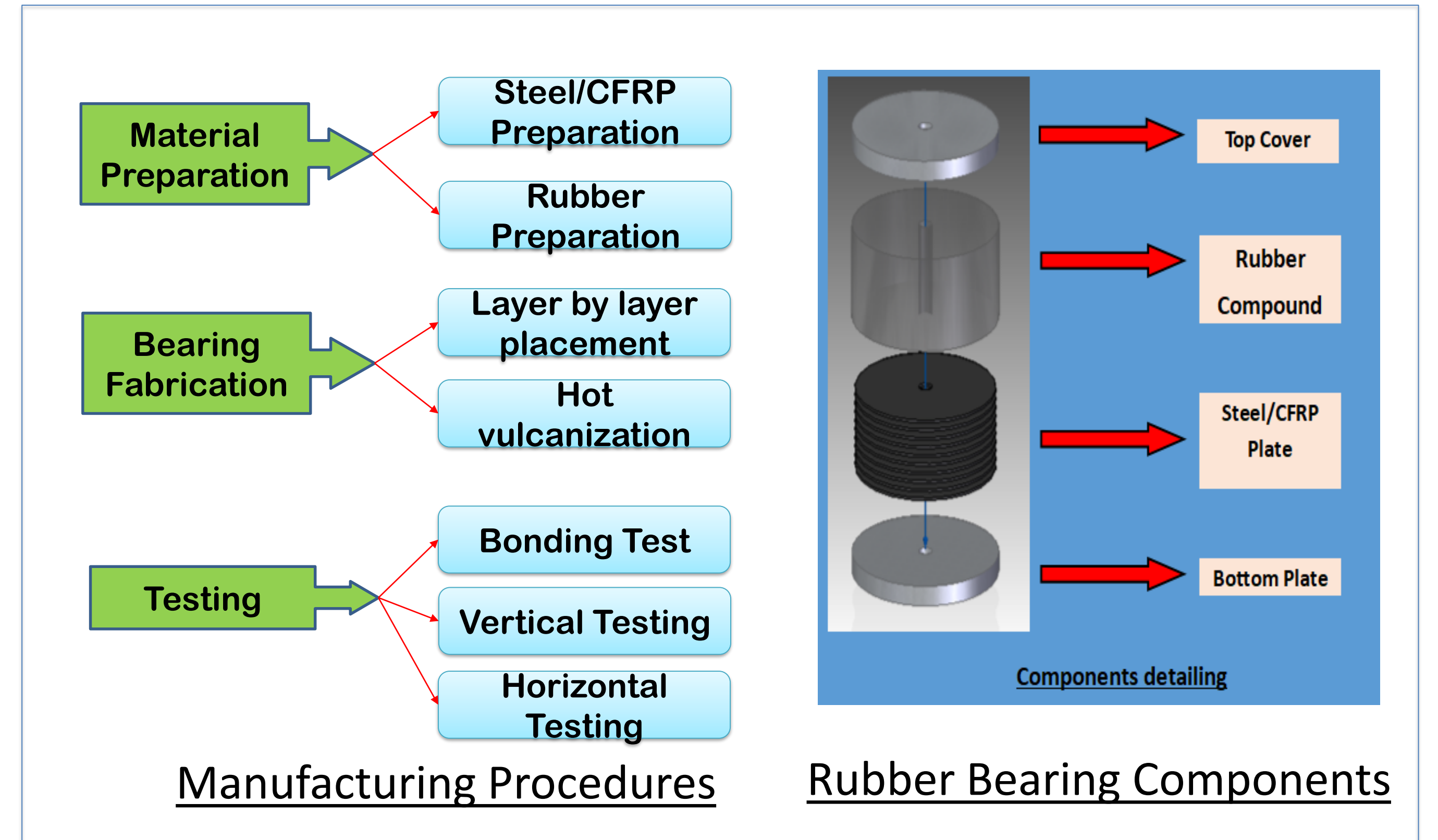


FRP Rubber Bearing for Earthquake Isolation System

IPR (PATENT/ID/C) NO



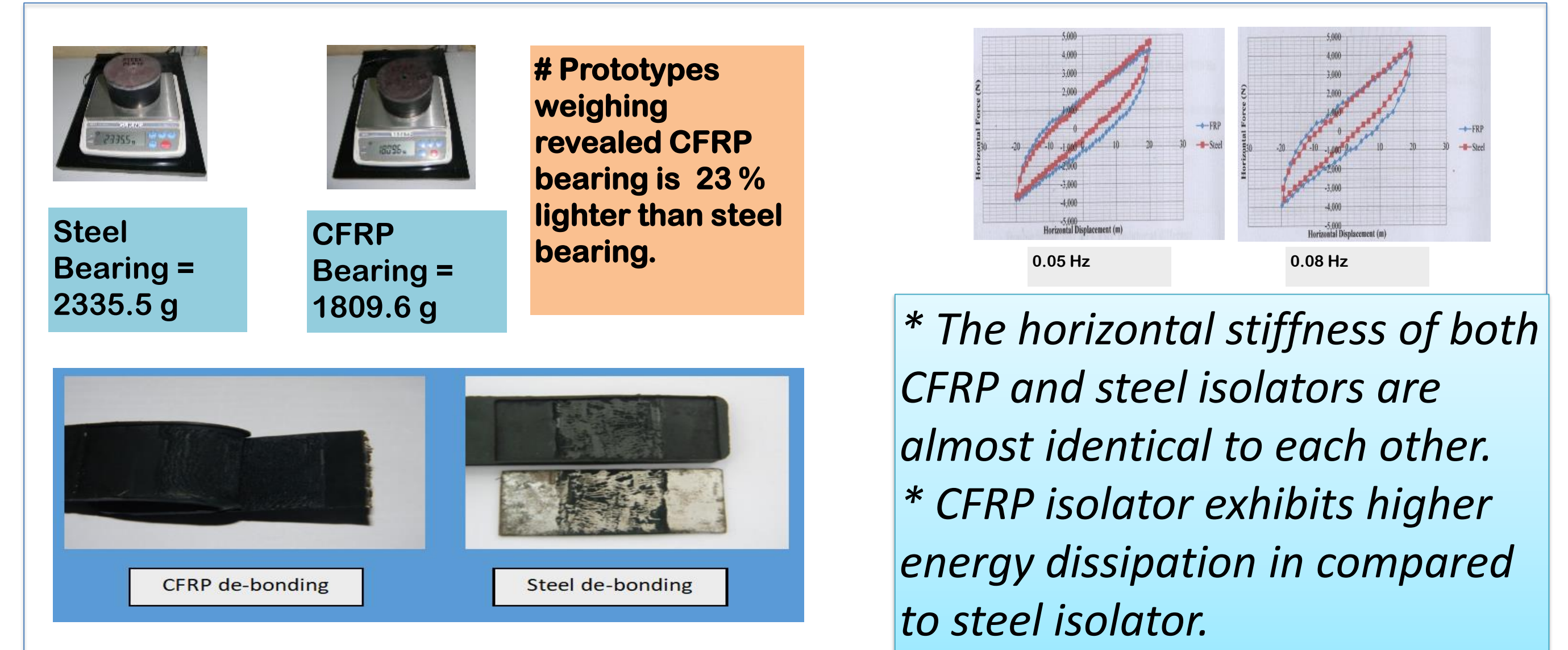
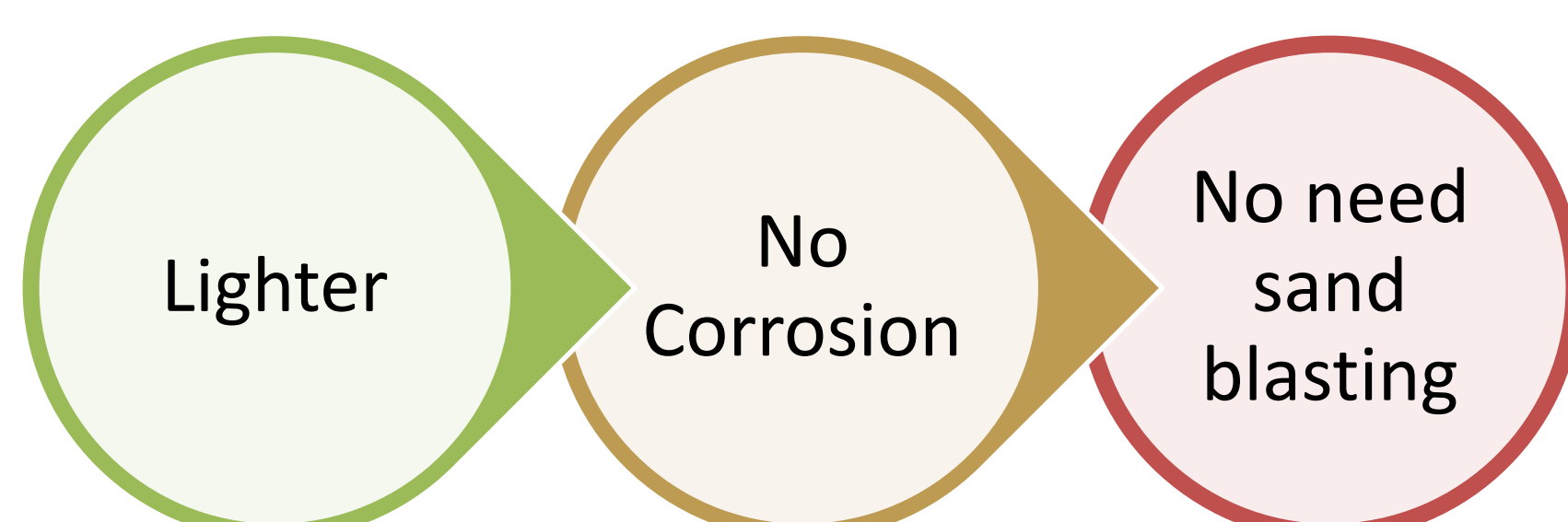
INTRODUCTION OF TECHNOLOGY

Earthquake is very catastrophe disaster which can heavily impact the social and economic factor of affected areas. The threat of earthquake in Malaysia can no longer be neglected and necessary measures should be taken to protect the important structures such as hospital and public service offices. Base isolation is one of popular method in protecting structures against earthquake forces. Base Isolation technique is more effective than conventional structural design for seismic resistance approach. It is widely used in earthquake prone countries such as Japan, USA and New Zealand. Elastomeric bearings normally produced in two main designs; cylindrical and cubic form

INVENTION

Current technology utilized steel as rubber bearing reinforcement. In this research works, we proposed CFRP material as internal reinforcement.

Advantages of CFRP vs Steel



ADVANTAGES

The installation of the FRP rubber bearing in structural system has many advantages such as

- Reduced manufacturing cost
- Reduce rubber bearing manufacturing time
- FRP has lighter weight the steel rubber bearing
- Reduce the need for more labor workforce
- Improved the energy dissipation of steel rubber bearing

MARKET POTENTIAL

Consumer/End User

- Public Services Buildings
- Commercial buildings

Industry

- Rubber bearing manufacturer
- Composite supplier
- Building and construction

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