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[\[Image PDF \(579K\)\]](#) [\[References\]](#)**A SEISMIC RISK ASSESSMENT PROCEDURE FOR GRAVITY
TYPE QUAY WALLS**Koji ICHII¹⁾

1) Port and Airport Research Institute

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A seismic risk assessment procedure based on the fragility curve concept is proposed in this paper. First, damage criteria for gravity type quay walls in terms of normalized seaward displacement are proposed considering the restoration cost. Second, a procedure to generate the fragility curve for each damage level using Monte Carlo simulation is proposed. Third, the fragility curves are utilized for the risk assessment of a quay wall under certain conditions based on the result of seismic hazard analysis. Finally, the proposed risk assessment procedure is examined with a case history from the 2000 Tottori-ken seibu earthquake.

Key Words: quay wall, deformation, seismic risk, seismic performance, fragility curves[\[Image PDF \(579K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)[RIS](#)[BibTeX](#)

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