absval_elim[12,41]

$\forall P{:}(\mathbb{Z} \to \mathbb{P}).\ (\forall x{:}\mathbb{Z}.\ P(|x|)) \iff (\forall x{:}\mathbb{N}.\ P(x))$

ProofTree

http://www.nuprl.org/FDLcontent/p0_942988_/p15_5667_{absval_elim}.html