

A is a well-formed type

$\Gamma \vdash A$

x has not been assigned a type by the rest of the environment

$x \notin \text{dom}(\Gamma)$

$\emptyset \vdash \Diamond$

$\Gamma \Sigma x:A \vdash \Diamond$

$\Gamma \vdash \Diamond$

K is a base type

$\Gamma \vdash K$

$\Gamma \vdash A$

$\Gamma \vdash B$

$\Gamma \vdash A \Rightarrow B$

$\Gamma \Sigma x:A \vdash \Diamond$

$\Gamma \Sigma x:A \vdash x:A$

id with a check of type env well-formed

Abstraction and application are as before - \Diamond checking is provided by id being the base case