

ma-interface-consistent-at^{11,40}

ma-interface-consistent-at($es; i; X$)
 \equiv_{def} let $ds, F = X(i)$
in
 $\forall k: \{k: \text{Knd} \mid \uparrow \text{hasloc}(k; i)\}$.
($\uparrow k \in \text{dom}(F)$)
 $\Rightarrow (\forall e @ i. (\text{kind}(e) = k) \Rightarrow (\text{valtype}(e) \subseteq_r (F(k).1))$
& ($\forall x: \text{Id}. \text{vartype}(i; x) \subseteq_r ds(x)?\text{Top}$))

clarification:

ma-interface-consistent-at($es; i; X$)
 \equiv_{def} let $ds, F = X\text{IdDeq}(i)$
in
 $\forall k: \{k: \text{Knd} \mid \uparrow \text{hasloc}(k; i)\}$.
($\uparrow \text{fpf-dom}(\text{KindDeq}; k; F)$)
 $\Rightarrow (\text{alle-at}(es; i; e. (\text{es-kind}(es; e) = k \in \text{Knd})$
 $\Rightarrow (\text{es-valtype}(es; e) \subseteq_r (F\text{KindDeq}(k).1)))$
& ($\forall x: \text{Id}. \text{es-vartype}(es; i; x) \subseteq_r \text{fpf-cap}(ds; \text{IdDeq}; x; \text{Top}))$)