

3.1. A Generic Statically Verified Language (**SVL**)

Syntax

$s \in \text{STMT}$

$\phi \in \text{FORMULA}$

Program State

$\pi \in \text{PROGRAMSTATE}$

Semantics

Static $\vdash \{\phi\} s \{\phi\}$

Dynamic $\pi \longrightarrow \pi$

Formula $\pi \models \phi$

Soundness

Syntax

$\tilde{s} \in \tilde{\text{STMT}}$

$\tilde{\phi} \in \tilde{\text{FORMULA}}$

Program State

$\tilde{\pi} \in \tilde{\text{PROGRAMSTATE}}$

Semantics

Static $\tilde{\vdash} \{\tilde{\phi}\} \tilde{s} \{\tilde{\phi}\}$

Dynamic $\tilde{\pi} \Longrightarrow \tilde{\pi}$

Formula $\tilde{\pi} \tilde{\models} \tilde{\phi}$

Soundness