Inference at $*$
 of proof for Lemma int_upper_properties:

$\vdash \forall i{:}\mathbb{Z},\ j{:}\{i\ldots\}.\ i \le j$
  by ProvePropertiesLemma

  .

---

http://www.nuprl.org/FDLcontent/p0_942988_/p121_95238_{int_upper_properties}.html