Inference at $*$ 1 1 1 2 1
of proof for Lemma comp_nat_ind_tp:

. . . . .wf. . . . . NILNIL

1. $P : \mathbb{N} \to \mathbb{P}\{\mathrm{k}\}$
2. $\forall i{:}\mathbb{N}.\ (\forall j{:}\mathbb{N}.\ (j < i) \Rightarrow P(j)) \Rightarrow P(i)$
3. $i : \mathbb{N}$

$\vdash i{+}1 \in \mathbb{N}$
by ArithMemberReflEqTypeCD

1:

$\vdash i{+}1 \in \mathbb{Z}$

2: . . . . .set predicate. . . . . NILNIL

$\vdash 0 \leq (i{+}1)$

3: . . . . .wf. . . . . NILNIL

4. $i_1 : \mathbb{Z}$

$\vdash (0 \leq i_1) \in \mathrm{Type}$

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