```
int_upper_ind  THM

⊢  ∀i:ℤ, E:({i...}→Prop).
|  E(i) ⇒ (∀k:{i+1...}. E(k-1) ⇒ E(k)) ⇒ (∀k:{i...}. E(k))
| by UnivCD
|
1. i : ℤ
2. E : {i...}→Prop
3. E(i)
4. ∀k:{i+1...}. E(k-1) ⇒ E(k)
⊢  ∀k:{i...}. E(k)
| by BackThruLemmaWithUnfolds
|    Thm* ∀n:ℤ. WellFnd{i}({n...};x,y.x<y)    {int_upper_well_founded}
|    [‘wellfounded‘]
|
⊢  ∀j:{i...}. (∀k:{i...}. k<j ⇒ E(k)) ⇒ E(j)  by UnivCD
|
5. j : {i...}
6. ∀k:{i...}. k<j ⇒ E(k)
⊢  E(j)  by Decide (j = i)
|
|\
| 7. j = i
| ⊢  E(j)  by Assert (j = i)
| |
| 8. j = i
| ⊢  E(j)  by HypSubst 8 0
|
.\
. 7. ¬j = i
. ⊢  E(j)  by (BackThru 4) THEN (BackThru 6)
END
```