```
sfa_doc_exteq_gprop  THM

⊢  ∀A:Type, P:(A→Prop). {x:A| P(x) }→Prop =ext x:A→Prop(given P(x))
| by UnivCD
|
1. A : Type
2. P : A→Prop
⊢  {x:A| P(x) }→Prop =ext x:A→Prop(given P(x))
| by New:f (2 Times Analyze) THEN FunExtensionality
|
|\
| 3. f : {x:A| P(x) }→Prop
| 4. x : A
| ⊢  f(x) ∈ Prop(given P(x))  by Guarding (<fun>(<arg>)) Analyze
|
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. 3. f : x:A→Prop(given P(x))
. 4. x : {x:A| P(x) }
. ⊢  f(x) ∈ Prop  by Analyze-1
. |
. 4. x : A
. 5. P(x)
. ⊢  f(x) ∈ Prop  by ApFun: f to: x
. |
. 6. f(x) ∈ Prop(given P(x))
. ⊢  f(x) ∈ Prop  by Rename5: w THEN Witness6: w
END
```