Deductively Sound Formal Proofs

Using the sound deductive inference model as the basis of the a notion of a formal system defines [Deductively Sound Formal Proofs]. Within (DSFP) closed Well-formed formula that were undecidable in other formal systems are excluded on the basis that they do not belong to deductively sound inference.

Beginning with the sound deductive inference model we have:
[a connected sequence of valid deductions from true premises to a true conclusion]

http://liarparadox.org/Provable_Mendelson.pdf
Γ ⊢ C as an abbreviation for "C is a consequence of Γ".
One way to conform the formal proofs of mathematical logic to the sound deductive inference model is to simply assume that the (Mendelson 2015:28): "Γ" specifies a set of true premises.

http://liarparadox.org/Haskell_Curry_45.pdf
Alternatively we could assume the Axioms of mathematical logic are true as (Curry 1977:45) does.

Deductively Sound Formal Proofs of mathematical logic would then become:
[a connected sequence of valid inference from axioms to a true consequence]
By construing Axioms as expressions of language having the semantic property of Boolean true.

LHS := RHS (The LHS is defined as an alias for the RHS)
[Deductively Sound Formal Proofs] specify a corresponding pair of predicates:
(1) True(x) := (⊢x)
(2) False(x) := (⊢¬x)

A third predicate provides semantic criteria of well-formedness.
(3) Deductively_Sound_Consequence(x) := (True(x) ∨ False(x))

In the same way that syntactically ill-formed formula are excluded as not belonging to formal systems, closed WFF that are not the consequence of deductively sound inference can be excluded from [Deductively Sound Formal Systems] on the basis of semantic criteria.