

**Proposal for C2Y
WG14 N3500**

Title: Clarification for complex suffix specification
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Date: 2025-02-14
Proposal category: Technical
Reference: N3435

6.4.5.3 #2 states “A floating suffix shall not designate a type that the implementation does not provide.” The two occurrences of “not” might be confusing. If the implementation supports decimal types, does `1.0dfi` present a constraint violation? The combination `dfi` does not describe a type because C does not specify complex decimal types. One might think the constraint that the suffix “shall not designate a type that the implementation does not provide” is satisfied because the combination of suffixes doesn’t designate any type. A suggested change below is intended to express the intent unambiguously. (If the implementation does not support decimal types, the `df` suffix presents a constraint violation, as noted in footnote 66.)

In 6.4.5.3 #5, the first two sentences are about complex suffixes. The rest of the paragraph is about something else, namely unaffixed literals and literals with real floating suffixes, and should be in a new paragraph.

Suggested changes:

In 6.4.5.3 #2, change

A floating suffix shall ~~not~~ designate a type that the implementation ~~does not~~ provides.

In 6.4.5.3 #5, introduce a new paragraph after the first two sentences, i.e. beginning with

An unaffixed floating literal ...