

Implicit and Explicit conversion

Consideration	Your Class?	Your Class?	Your Class?
same platonic thing?	yes	no[1]	-
info fidelity	no loss	some loss	more loss
performance penalty?	little/no	some	yes
throws?	noexcept?/rarely?/ same as copyctor?	yes	-
danger? (dangling, etc)	no	yes	-
code review?	no need	self-policed[2]	greppable / policeable
generic code?	strict	less strict	"extension point"
can modify class?	yes	yes	no
are you sure?	yes	no	-
Result	Implicit ctor/cast	Explicit cast/ctor Named	Explicit cast/ctor Named

1. If not the same platonic thing, you can have an explicit constructor, but you shouldn't have a cast at all
2. 'self-policed' - Explicit conversions are more for situations where you want the developer to stop for a second and think about the conversion, but have enough faith in the average developer to make a good choice, and don't feel it typically needs much further policing. You can see it in a code review, but harder to grep for.

Source: <https://www.open-std.org/jtc1/sc22/wg21/docs/papers/2017/p0705r0.html>

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