

Capability Hierarchy

std::atomic<Integral / T*>

+ fetch_add / fetch_sub
+ fetch_and / _or / _xor (Integral)
+ operator++, --, +=, -=



std::atomic<T / bool>

+ load() / store()
+ exchange()
+ compare_exchange_weak/strong
+ wait() / notify_* (C++20)

← CAS



std::atomic_flag

+ test_and_set()
+ clear()
* (Lock-free Guarantee)

