Build Composing Scenario: Source 1 Initial State

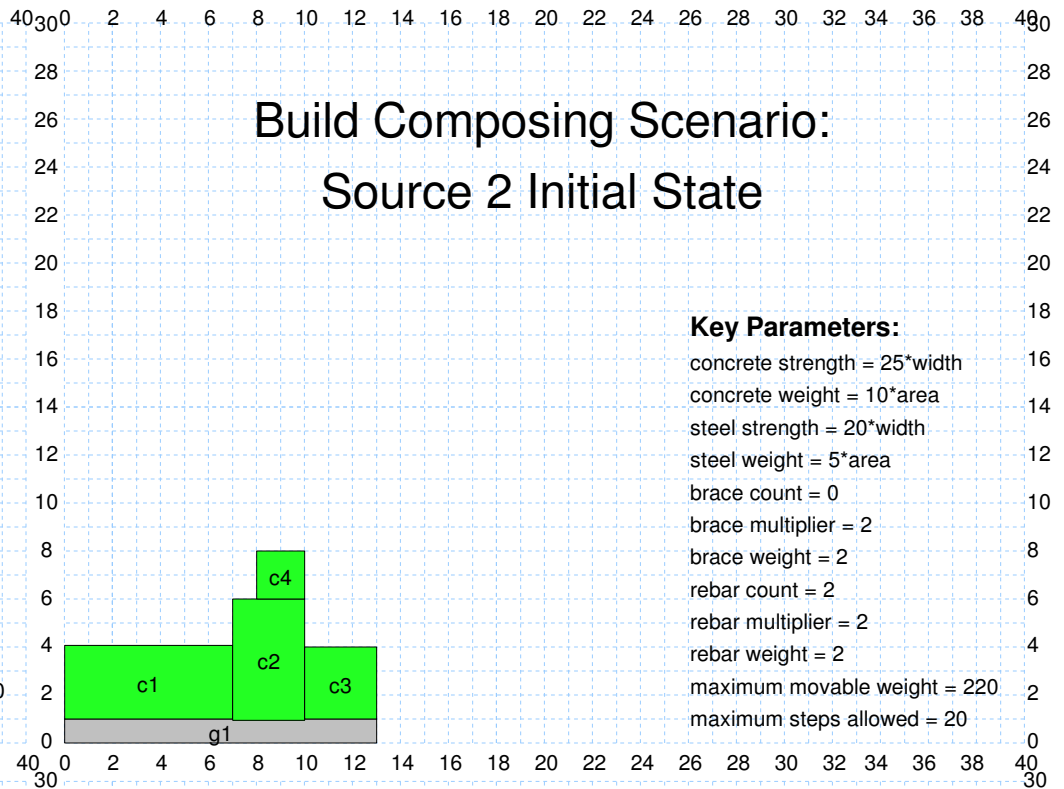# Build Composing Scenario: Source 2 Initial State

Key Parameters:

concrete strength = 30*width
concrete weight = 10*area
steel strength = 20*width
steel weight = 5*area
brace count = 4
brace multiplier = 2
brace weight = 2
rebar count = 0
rebar multiplier = 2
rebar weight = 2
maximum movable weight = 220
maximum steps allowed = 20

Key Parameters:

concrete strength = 25*width
concrete weight = 10*area
steel strength = 20*width
steel weight = 5*area
brace count = 0
brace multiplier = 2
brace weight = 2
rebar count = 2
rebar multiplier = 2
rebar weight = 2
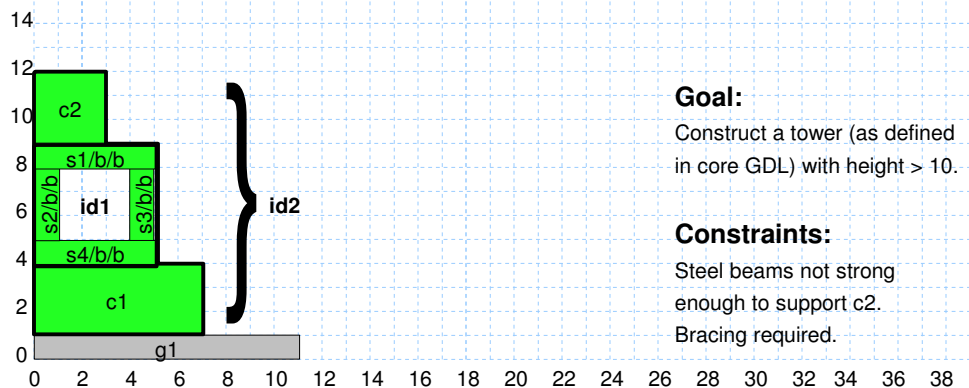maximum movable weight = 220
maximum steps allowed = 20

Build Composing Scenario: Source 1 Goal State

Build Composing Scenario: Source 2 Goal State

Goal:

Construct a tower (as defined in core GDL) with height > 10.

Constraints:

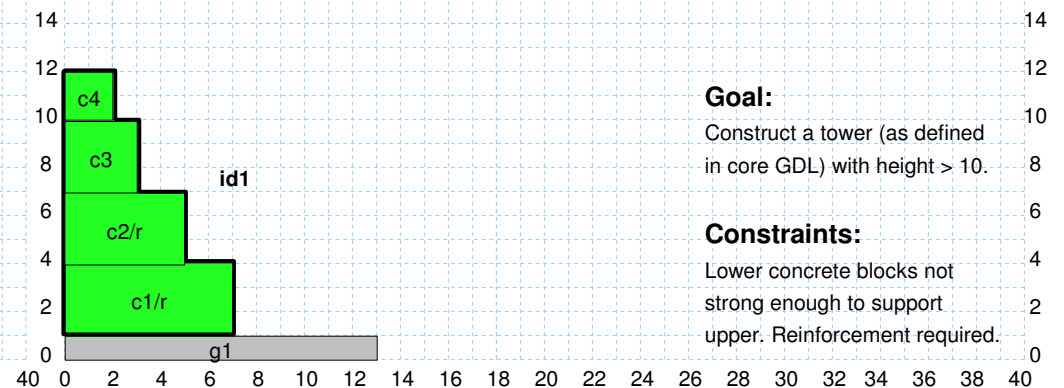Steel beams not strong enough to support c2. Bracing required.

Goal:

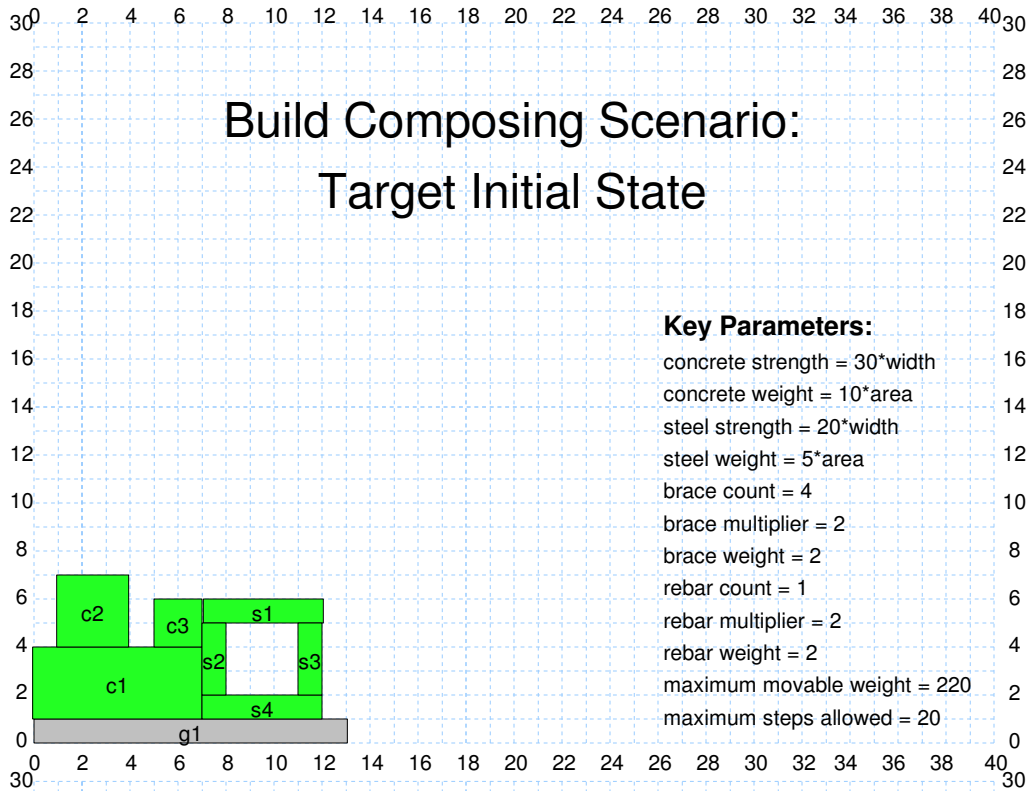Construct a tower (as defined in core GDL) with height > 10.

Constraints:

Lower concrete blocks not strong enough to support upper. Reinforcement required.

Build Composing Scenario: Target Initial State

Key Parameters:

concrete strength = 30*width
concrete weight = 10*area
steel strength = 20*width
steel weight = 5*area
brace count = 4
brace multiplier = 2
brace weight = 2
rebar count = 1
rebar multiplier = 2
rebar weight = 2
maximum movable weight = 220
maximum steps allowed = 20

Blocks: c2, c3, s1, c1, s2, s3, s4, g1

Build Composing Scenario: Target Goal State

Blocks: c3, c2, s1/b/b, s2/b/b, id1, s3/b/b, s4/b/b, c1/r, id2, g1

Goal:
Construct a tower (as defined in core GDL) with height > 12.

Constraints:
Steel beams not strong enough to support c2 and c3, bracing required. Bottom concrete block not strong enough to support tower, reinforcement required.
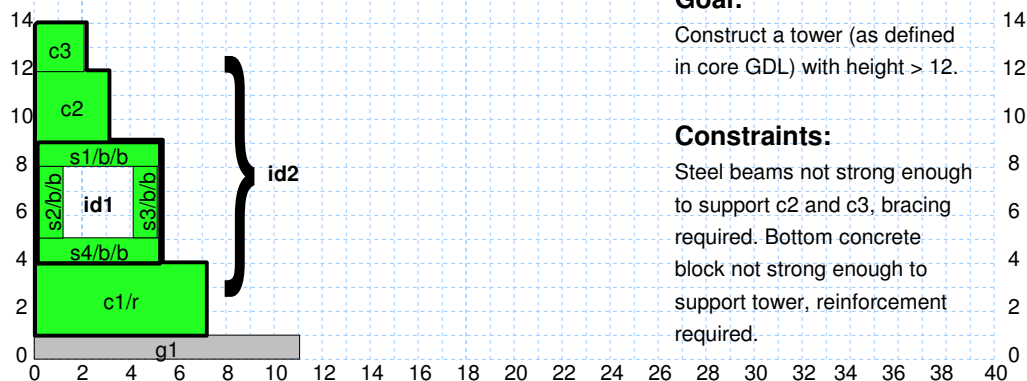
Scenario implementation details: Core definitions (build.core.kif) remain fixed for both sources and the target. Initial state details and parameters change among individual games.

Source 1:
- Two concrete blocks
- One steel frame (four steel beams, preformed)
- Four braces

Source 2:
- Steel frame replaced with vertically oriented concrete block
- Braces replaced with two rebar
- Strength of concrete reduced
- Fourth concrete block added

Target:
- Three concrete blocks
- One steel frame (four steel breams, preformed)
- Four braces
- One rebar
- Concrete strength as in source 1