



Guide to Breaking Materials

What to Purchase

Where do I go?

- The wood that we use for breaking can be purchased at most hardware or lumber stores, and Home Depot or Lowes should generally be stocked with a healthy selection.

Which product am I looking for?

- In the Common Boards area of the lumber section, you will find selections of Number 2 Pine in various sizes and lengths.
 - There are other types of wood available in this section, including other grades of pine.
 - Higher grades of pine cost more but do not grant additional benefits for this purpose. After all, we're just going to be breaking it anyways.



What size should I buy?

- Lumber sizes are listed by their dimensions, corresponding to the original rough lumber. After milling, the final thickness of the 1" boards we use is ~3/4" thick.
- No matter what size your final board cuts will be, you **must** start with a board that is 1"x12"x(L)'.
 - The length of the board (L, above) is up to you and will only dictate the final number of boards you have after cutting to size.



Shelf tag from a 1"x12"x6' board
(recommended size)

Selecting Your Wood

Just as with any other organic material, each board on the shelf will be unique in many ways from the one next to it. Though they will all be the right starting size, there are various positive and negative qualities to look for that can have an impact on how suitable the final boards are for breaking.

Qualities to look for

- Straight, parallel grain (lines) running the length of the plank
- Humidity – Dry to the touch
- Weight – Light; low density
- Color – Pale, blond
- Flex – Light bend under pressure



Qualities to avoid

- Cracks
- Excessive knots, looping grain
- Humidity – Moist/sticky to the touch
- Weight – Heavy; high density
- Color – Deeper orange tones
- Flex – No bend under pressure



Large knot, looping grain



Excessive knots



Crack at top running along the grain

Cracks are the only negative quality that will disqualify a board from use, however the presence of the others can make a board more difficult to break and/or increase the risk of injury.

Cutting to Size

Where do I get the boards cut?

- In most cases the store you purchase the plank from will have a crosscutting station available. It should be in or near the aisle where you found the boards. An employee will cut the plank into boards of your specified width either as a free service or for a nominal fee per cut.
- If you wish to cut the board yourself, a sliding miter saw with a crosscut capacity >12" is recommended for getting straight, consistently cuts, although the same can be accomplished with a handsaw, patience, and elbow grease.

What size should they be cut to?

- The appropriate width of the final boards is determined by the age and rank of the individual that will be breaking.

Level	Age	Board Width (Recommended)	Approx. yield from a 6' plank
Peewee	3 - 6	Motivational*	n/a
Gup (color belt)	7 - 8	6"	11
	9 - 12	8" (10" permissible)	9
	13+	10" (8" permissible)	7 - 9
Dan (black belt)	16 & under	10" (8" permissible)	7 - 9
	17+	10"	7

How many boards do I need?

- This differs based on the event (test vs. competition) and the level of the student. Generally speaking, students should expect to bring a minimum of 2 boards to a given event.
 - If available, it is recommended to bring 1-2 spare boards along. These can always be held onto for the next event if not needed.

*Motivational boards are an engineered wood product that is used for building and boosting the confidence of our youngest students. When called for, these boards will be provided by the school or competition organizers.

Tips and Tricks

Selection

- In all likelihood, you will not find the perfect plank. Most will have some good qualities and some bad, but spending a few minutes to look through the available selection will generally result in better performance when it comes time to break.
 - If there is no perfect one, find the one with the most positive qualities and the fewest negative ones.
- Prioritize! In order of importance...
 - Weight
 - Grain pattern
 - Flex
 - Humidity
- Don't let a big, gnarly knot sway your choice. Better to sacrifice one terrible section to get 6-8 great boards than to choose a plank that will give you 7-9 mediocre ones.

Miscellaneous

- Store boards in a cool, dry place. Heat and humidity can cause warping and swelling.
- Cut enough boards at a time to have spares for this event and the next one too. Try to avoid scrambling at the last minute before an event.
- For competition, review the rules in advance to confirm the number of stations (1-3) and boards the student will need.

A note about Concrete: Wood is not the only material that can be broken, however it is the only one permissible in our region. Concrete blocks that are available for purchase in the Northeast region are engineered to withstand freeze/thaw cycles. Attempting to break them can result in serious injury and is actively discouraged.