

LINE AND BATTER Part 1

Last summer I was judging at a walling competition when one of the spectators, an Advanced certificate holder, noticed that one of the professionals was not using line bars or strings. The competitor was a visitor from another area and never walls with lines, relying on building by 'eye'. The spectator was aghast, surely it was against the rules, unfair, inconceivable, even arrogant. No way could you get the line and batter right without bars and lines.

I have some sympathy with this notion, but only to the extent that without a line and bars it is unlikely to be perfect. It doesn't mean it will be bad, and as was the case this day, it was still better than the vast majority of those actually using aids. It can be difficult to wall by eye, it requires a certain skill, but then to some extent so does using lines and profiles. It amazes me how often they are badly used, to the extent that it's hard to see what the advantage over building by eye might have been. This article will be the first in a short series (2 or 3, we'll see how it goes), dealing with line and primarily batter (sometimes called camber). Later on there will be some tips on line and batter in practice, but firstly how it fits into the certification scheme, why its important and next time a bit of theory for my fellow anoraks. Problems with line and batter are almost impossible to illustrate with photographs. So you have my apologies this, mini-series is likely to be more wordy than normal.

As wallers progress through the Craftsman Certification Scheme increasing emphasis is placed on line and batter. At the initial level there are no specific marks for this aspect of the wall. Here more emphasis is placed on sound, strong and solid construction than on level of finish. However examiners do consider line and batter when marking the first and second lift. As long as the general shape is good then candidates will not be penalised, some credit will be given for very good line and batter, but the test is primarily about strength. As such candidates are penalised where the line/batter threatens the structural integrity of the wall generally because there is a bad dip or a severe bulge. Exactly why these might be of concern we shall come to in due course.



A straight, evenly battered wall. Or is it? The flattening of cameras images tends iron out irregularities.

From intermediate level onwards there are actual marks awarded separately for both line and batter. The first thing to do is explain how these inter-related aspects are actually distinct. To put it simply, line is along and batter is up. Actuality is a little more complicated as the distinctions are often very subtle indeed, and can be somewhat confusing.

If the occasional stone or stones are poking out, this tends to be regarded as a fault with the line. The stone is out of line and unless there are several others immediately around it, it's not a bulge. If several stones are out of line forming a supported ledge or worse still a bulge, then this tend to actually be a fault in the batter. Similarly extended or elongated dips/bulges are more a fault with batter than line. The larger the defect then the more likely it is also affecting line. These are very subtle distinctions; it depends essentially on whether or not the length of the wall is still going in the right direction, and how localised the problem is. Perhaps one way of looking at is to think of a short length of wall which has perfect batter but is wider at one end than the other. The ideal is perfect batter and parallel sides, so this diverging (or converging - literally depending on how you look at it) wall has a fault with the line. Those familiar with competitions should be aware of this problem. A master-line is run out along the whole length competitors put their line bars against this 'master line', then lean them to the required batter. This effectively moves them relative to the correct line. The end result is a series of slightly zigzagging walls which even though they might have the right batter, have the wrong line. Hence an individual section of wall can have the wrong line even if it is perfectly straight. Oh dear!

It gets worse. A wall might have two perfect straight and flat faces. However if one side is battered more than the other, then the batter is wrong on one side (regional and technical excuses notwithstanding). One of the criteria by which examiners mark tests, requires them to check this lop-sidedness. It can of course also be the case that both sides are nice

and flat, yet both are set to the wrong batter, how serious a problem this is tends to be a cause of some debate. Possibly more seriously a wall can appear straight but have a skewed batter, that is one (or both) sides have a different batter at either end.



As can be seen here a severe bulge is a fault in both line and batter.

Dips and bulges are more obvious, and bad ones are a definite fault. The error is primarily in batter, but also line. This is a 'double whammy' when it comes to shedding mark, and is of particular concern at Advanced and Master's levels. This is why such faults in these tests frequently lead to overall failure.

There seems to be a myth that you must use profiles and lines in the tests, and as noted earlier, by some people with walling in general. This perhaps stems from the craftsman certification scheme leaflet which states that marking of batter considers "*correct use of frames and pins to set camber*" [batter], and that line and straightness takes note of "*correct use of lines: taut, level, correct width*". If you use them their use is considered, just as if you use a hammer; safe use will be considered, unsafe use will be penalised, but should you not wish to use a hammer that's fine. Many of the best wallers in the land, - umpteen times Grand Prix champion Steven Allen and most recent champion Andy Mason, to name but two - rarely use lines. Whilst their line and batter isn't as good as mine (tee hee), there's rarely very much to fault. As long as the wall is straight and even battered you pass this aspect. However as you progress through the scheme the level of finished required increases at each stage, as does the overall pass mark. At these levels there are a fair few marks available for line and batter and you cannot afford to drop many if you are going to achieve the minimum overall pass mark. In fact this is an area where you should be looking to make the gains that boost your overall mark above the minimum. The problem is that since both facets tend to go wrong together there is the aforementioned double whammy when you make a mistake.

So you risk a lot by not using profiles and lines. Unless you are very good, the

chances of something going wrong are that much higher. However good you are, you are unlikely to approach perfection without lines. Consequently picking up much needed marks will be harder.

In a test you are, as ever, aiming at an ideal, meeting specific criteria. As far as batter is concerned that is the wall should come in evenly, with an absence of bulges or hollows in rise of the wall. For the line the wall should have an even width at any given height along its length, and there should not be any bends or bulges along the length. In addition as far as testing is concerned if you are building a coursed wall, or setting covers beneath the cope, these too are considered in the line mark. In a random wall how level you set the stones is a factor in line.

Why worry? Are all walls A shaped? If not why not? Is there such a things as a standard batter? How is batter calculated? The answer to these and more (possibly less) next time.

Craig Arbennigol

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Overhanging wall, Gower Peninsula, South Wales