

# Shelf Sweep Fade Hedge

Expert Advisor Documentation

## PLATFORM

MetaTrader 5 (MT5)

## TYPE

Mean Reversion (Fade) + Breakout Hedge

## TIMEFRAME

M5 – M30

## WEBSITE

[www.algotbot.live](http://www.algotbot.live)

**⚠ Important Disclaimer** This document is for educational and informational purposes only. It does not constitute financial or investment advice. Trading forex, CFDs, and other leveraged instruments involves substantial risk of loss and is not suitable for all investors. Past backtest performance does not guarantee future results. Never trade with capital you cannot afford to lose.

## Overview

**Shelf Sweep Fade Hedge** is a pure price-action Expert Advisor that **fades** failed breaks of a proven horizontal support/resistance level — a price "shelf" — and protects that contrarian bet with a structural **breakout hedge**. It uses *no indicators of any kind*: there are no moving averages, RSI, ATR, or VWAP calls anywhere in the logic. Every decision is read straight off the raw OHLC of the chart's current timeframe.

The core idea is the deliberate mirror image of a breakout system. Where a breakout EA buys the break of a level, this EA **sells the failure of the break**: it waits for price to sweep liquidity beyond a twice-tested shelf, get rejected with a long wick, and close back inside the range — then it fades that move, expecting reversion off the shelf.

Because a fade's one true weakness is a *genuine* breakout, the EA layers a hedge on top. While the fade is open, it watches for a candle that **closes decisively beyond the shelf**. That close says "this was not a sweep, it was a real break," so the EA opens an opposite position to ride the breakout it was just run over by. When the primary trade finally resolves at its own stop or target, any surviving hedge is flattened so the basket always returns flat — one clean lifecycle at a time.

**What makes it distinctive:** the strategy never relies on a single read of the market. The fade is the primary thesis; the hedge is its built-in insurance against being wrong about the level. Only one primary trade and at most one hedge exist at any moment.

## How It Works

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### 1. The Shelf (the level worth fading)

Over the most recent `StructureLookback` bars (before the signal bar), the EA records the extreme high (resistance) and extreme low (support). A level only qualifies as a tradable shelf if at least `MinTouches` bars came within `TouchTolerancePoints` of it — meaning price has genuinely *reacted* there before. A lone spike with a single touch is not a shelf and is ignored.

### 2. The Setup (read off a freshly closed bar)

The EA evaluates a new setup only when a bar closes. The signal bar ( `c` ), the prior bar ( `b` ), and the bar before that ( `a` ) supply everything the logic needs.

#### SHORT SETUP — FADE THE RESISTANCE SHELF

- **Sweep:** the signal bar's high pierces the resistance shelf (a stop-run on the highs) but the bar **closes back below** the shelf.
- **Rejection:** a dominant upper wick — at least `RejectionWickFactor` × the bar's body, and larger than the lower wick.
- **Momentum filter:** the signal bar's range must exceed `MomentumRangeFactor` × the average range over `AvgRangePeriod` bars, so only decisive rejections trade.
- **Optional confirmation:** a bearish engulfing of the prior body ( `RequireEngulfing` ) and/or a 3-bar bearish Fair Value Gap of downside displacement ( `RequireFvg` ).
- **Action:** SELL back into the range.

#### LONG SETUP — FADE THE SUPPORT SHELF

The exact mirror: the signal bar sweeps below the support shelf, closes back above it with a dominant lower wick, passes the same momentum (and optional engulfing/FVG) filters, and the EA fades it with a BUY.

### 3. Stops and Targets (structure-based, no ATR)

- **Stop loss** sits just beyond the swept wick — the resistance high for shorts, the support low for longs — plus `StopBufferPoints` . That is the price that proves the shelf has genuinely given way.
- **Take profit** is placed at `RewardRisk` × the stop distance, harvesting the reversion back off the shelf.

- If the computed stop distance is tighter than the broker's minimum stop level, the EA widens it to a safe minimum before sending.

#### 4. The Hedge (the structural breakout flip)

While the primary fade is open, and only on a newly closed bar, the EA checks whether price has **closed beyond the faded shelf** by `HedgeBufferPoints` :

- If the faded **resistance** breaks upward (a close above it), the short fade was wrong — the EA opens a **long hedge** to ride the breakout.
- If the faded **support** breaks downward, it opens a **short hedge**.

The hedge trades `HedgeLots` volume, places a retest-style stop `HedgeStopBufferPoints` inside the broken shelf, and targets `HedgeRewardRisk` × that stop distance. Hedge legs are tagged with their own magic number ( `Magic + 1` ) so they are tracked separately. At most one hedge is opened per primary lifecycle.

#### 5. Lifecycle Management

The EA never seeks a new entry while any position (primary or hedge) is open. When the primary closes at its own SL/TP, any surviving hedge is immediately flattened so the basket returns flat. Only once everything is closed does the EA arm a fresh lifecycle and look for the next shelf to fade. New entries are also skipped whenever the current spread exceeds `MaxSpreadPoints` .

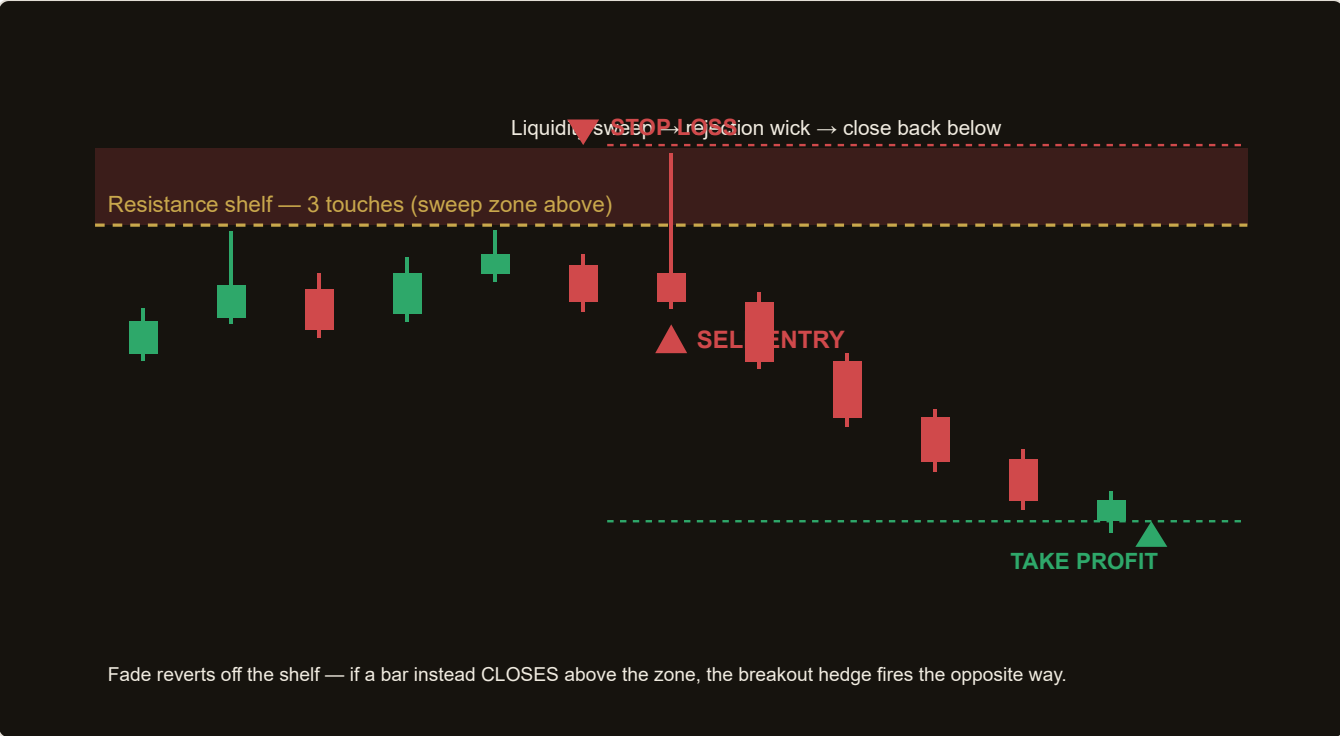
##### Worked example — short fade

Resistance sits at 1.10500 and has been touched 3 times over the last 24 bars. A bar spikes to 1.10560 (sweeping the highs), then closes at 1.10470 — back below the shelf — leaving a tall upper wick more than 1.2× its body. Its range is well above the recent average. The EA sells near 1.10470, places the stop just above 1.10560 (plus the buffer), and targets 1.6× the risk below entry. If a later bar instead *closes* above ~1.10560, the EA opens a long hedge to ride the genuine breakout.

## Strategy in Action

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The illustration below shows an example of how the strategy identifies a setup and triggers its entry and exit. This is a simplified, illustrative example for educational purposes — not real market data.



*Illustrative example only. Actual market behaviour varies.*

## Parameters

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Parameter	Default	Description
StructureLookback	24	Window (bars) used to define the support/resistance shelf to fade. Range 8–80.
TouchTolerancePoints	60	How close (in points) a bar must come to the extreme to count as a "touch". Range 5–600.
MinTouches	2	Minimum touches needed for the level to qualify as a real shelf. Range 1–6.
RejectionWickFactor	1.2	Rejection wick must be at least this multiple of the signal bar's body. Range 0.3–4.0.
AvgRangePeriod	14	Window for the average bar range used by the momentum filter. Range 5–40.
MomentumRangeFactor	1.0	Signal-bar range must exceed this multiple of the average range (momentum). Range 0.3–3.0.
RequireEngulfing	0	Also require an engulfing of the prior body for confirmation (1 = on, 0 = off).
RequireFvg	0	Also require a 3-bar Fair Value Gap (displacement) confirming the reversal (1 = on, 0 = off).
StopBufferPoints	40	Extra points beyond the swept wick for the protective stop. Range 0–500.
RewardRisk	1.6	Take-profit as a multiple of the stop distance (reward : risk) for the fade. Range 0.5–5.0.
HedgeEnabled	1	Enable the structural breakout hedge (1 = on, 0 = off).
HedgeBufferPoints	60	A close beyond the shelf by this many points confirms a real breakout and triggers the hedge. Range 5–1000.
HedgeStopBufferPoints	80	Hedge stop sits this many points inside the broken shelf (retest stop). Range 5–1000.
HedgeRewardRisk	1.8	Hedge take-profit as a multiple of the hedge stop distance. Range 0.5–6.0.
MaxSpreadPoints	80	Skip new entries while the spread (points) is wider than this. Range 5–400.

Parameter	Default	Description
HedgeLots	0.10	Hedge volume (full-size hedge $\approx$ market-neutral; smaller = partial). Range 0.01–1.0.
Lots	0.10	Primary fade volume. Range 0.01–1.0.
Magic	7714	Base magic number identifying this EA's trades. Hedge legs use <code>Magic + 1</code> .

## Recommended Settings

The strategy is designed for liquid, range-then-break instruments and runs on whatever timeframe the chart is set to at the time. It reads only the current chart's timeframe — it never references a hardcoded or higher timeframe.

- **Instruments:** EURUSD, XAUUSD (Gold), or a major index.
- **Timeframe:** M5 to M30, where shelves form and get swept frequently.
- **Confirmations:** the defaults leave `RequireEngulfing` and `RequireFvg` off for more frequent trades. Turn one or both on to demand stronger confirmation and reduce trade count.
- **Hedge sizing:** set `HedgeLots` equal to `Lots` for a near market-neutral hedge, or smaller for a partial hedge that still leaves the fade as the dominant exposure.

**Tuning tip:** the shelf quality is governed by `MinTouches` and `TouchTolerancePoints`. Raising `MinTouches` demands a more proven level (fewer but higher-conviction fades); widening `TouchTolerancePoints` makes near-misses count as touches, which finds shelves faster on noisier instruments. Always re-run the Strategy Tester after changing them for your symbol and timeframe.

**Hedging account required.** This EA opens an opposite-direction position (the hedge) on the same symbol while the primary is open. It must run on a **hedging** MT5 account, not a netting account, or the opposite order will offset the primary instead of hedging it.

## How to Install on MetaTrader 5

- 1 Copy `ShelfSweepFadeHedge.ex5` to your MT5 `MQL5\Experts\` folder
- 2 Restart MetaTrader 5 and refresh the Navigator panel
- 3 Drag the EA onto a chart matching the recommended symbol and timeframe

4 Configure the input parameters and click **OK**

5 Enable **Algo Trading** in the MT5 toolbar

## Risk Warning

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