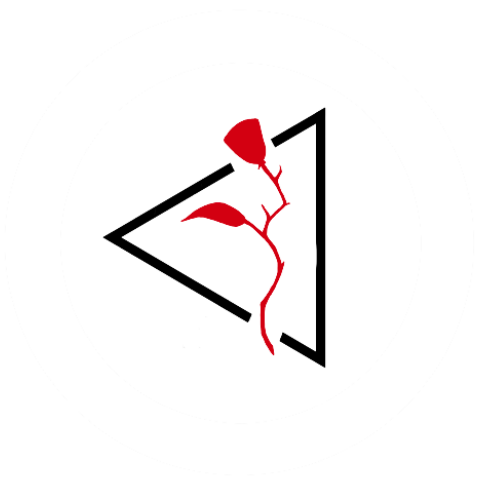


# UNDERWORLD LARP WEAPON AND ARMOUR GUIDE V1.4

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# 1 TABLE OF CONTENTS

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2	Guidelines.....	3
3	Weapon Construction & Rules .....	4
3.1	Colours for Boffer Weapons.....	4
3.2	Legal Striking Zones & Player Safety .....	4
3.3	Melee Weapons.....	5
3.3.1	Approved Materials.....	5
3.3.2	Construction Requirements.....	5
3.3.3	Stiletos.....	6
3.3.4	Fist Weapons.....	6
3.3.5	Maces/Hammers/Mauls .....	6
3.4	Ranged Weapons – Bows, Arrows, Bolts & Rocks.....	7
3.4.1	Approved Materials.....	7
3.4.2	Construction Requirements.....	7
3.4.3	Safety Requirements .....	7
3.4.4	Rocks .....	7
4	Shield Construction & Rules.....	9
4.1	Approved Materials .....	9
4.2	Construction Requirements.....	9
4.3	Safety Requirements: .....	9
5	Armour Construction & Rules.....	9
5.1	Armour Points & Quality of Armour .....	9
5.1.1	Point Deductions.....	10
5.1.2	Ineligible Armour / 0 Armour Points.....	10
5.2	Armour Grades .....	10
5.3	Special Situations .....	13
5.3.1	Pteruges & Faulds .....	13
5.3.2	Garrote Protection .....	13
5.3.3	Special Armour Locations and Coverage.....	13
6	Armour Coverage Locations (“Armour Guy”).....	14

## 2 GUIDELINES

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- This guide is the one-stop resource for the construction of Underworld LARP weapons, armour, and shields. In the event that the Core Rulebook contradicts what is found here, this guide will be taken as accurate. Please note the following:
- All weapons and armour are subject to testing and approval by the Weapons & Armour Marshal team, including their Home Guild, or when visiting other Guilds.
- All weapons, armour and shields must be inspected by a Weapons & Armour Marshal when brought to a Guild for the first time to receive a signed and dated safety sticker. Weapons and shields must be rechecked for safety every three months. Armour must pass an annual inspection every Spring.
- Any Guild can add additional rules to their requirements to make something safer but cannot remove any rules listed that would make things less safe.
- All weapons, armour, and shields must match the theme of Underworld LARP - dark fantasy and horror.
- Armour must be determined to be safe before it will be evaluated for Armour Points or can be worn at Underworld. If your rep is determined to be unsafe, the evaluating Marshal will give you advice on how it can be improved in order to be determined as safe. Example - Metal spikes or sharp studs may be denied but foam ones might not.
- All items will be evaluated for safety on a case-by-case basis.

## 3 WEAPON CONSTRUCTION & RULES

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### 3.1 COLOURS FOR BOFFER WEAPONS

To qualify, a weapon must have 75% of its striking surface coloured. The colours listed below are what the boffer weapon will represent to players in game. Please note that these colours can be from the following (but not solely restricted to, pending a weapon safety Marshal's approval): Duct Tape, Sword Sock, Cloth Tape, Latex Paint. If this is your first time constructing weapons, we encourage you to please use Duct Tape as it is the easiest to work with and will not cost very much.

SILVER / GREY = Normal, Iron, Silver

BLUE = Psionic

RED = Natural Weaponry and Hand to Hand

WHITE (or a white stripe to any of the above) = Magic version of the above

Weapons for Underworld should be constructed to the size standards put forth in the weapons construction guide, found at the end of this section.

### 3.2 Legal Striking Zones & Player Safety

All weapons have legal striking zones, which must be sufficiently padded, as detailed in Construction Requirements. These areas are the only part of the weapon you may use to attack another player with. Striking with the "flat" side of a weapon, which does not have adequate foam padding for safety is not permitted. A pommel may never be used as a striking zone.

The striking zone for all weapons must be at the "top" of the weapon – the sword blade, axe head, etc. No melee weapons, except the Staff, may have striking zones at the top and bottom of the weapon.

## 3.3 MELEE WEAPONS

### 3.3.1 Approved Materials

The following materials are approved for the creation of “Boffer” weapons:

- *Open Cell foam:* Open Cell foam is made of little bubbles. In open-cell foam, at least half of these are connected to each other, which allows air to pass between adjacent bubbles. The nature of open-cell foam makes it feel softer and more elastic than its closed-cell counterpart, which is why it is often used in cushions.
- *Close Cell foam:* Close Cell foam is defined as a cell totally enclosed by its walls and hence not interconnecting with other cells. Pipe insulation, cross linked polyethylene foam (sheets or interlocking foam mats) are all examples of Close Cell foam.
- *Cores:* PVC pipe, solid or hollow fiberglass rod.
- *Handles for fiberglass core weapons:* Wood, leather, compacted foam PVC.
- *Handles for fiberglass core weapons:* Wood, leather, compacted foam, or otherwise padded fiberglass

### 3.3.2 Construction Requirements

- All weapon cores must be a single, unbroken length. They cannot be separate pieces connected by a coupler, or any other form of connecting.
- No weapon core may have a greater curve than 45 degrees.
- Underworld LARP permits two kinds of weapons with cores: a PVC core weapon, and a fiberglass rod core weapon. Each has different requirements for core thickness and padding.
- All weapons must conform to the Weapon Construction Chart.
- PVC core weapons must have a minimum of 1/2" foam padding around the core, and no less than 1" foam padding on all legal striking surfaces. The foam on striking surfaces must spring back when compressed, and the core must not be felt through this padding.
- Fiberglass core weapons must follow the provided Fiberglass Core reference chart.
- Foam on striking surfaces should be thick enough that a marshal cannot feel the core while compressing the foam with their thumb under moderate pressure.
- Thrusting with latex weapons is permitted using the lightest touch rule - the attacker may only use enough force for the thrust to be gently felt.
- No foam or core may be exposed.
- All fiberglass rod weapons require a secure and durable handle to prevent wrist injury.
- All boffer weapons require an Open Cell foam cap at the end of thrusting weapons. Fist and stiletos are exempt from this.
- Blades and pommels must be securely attached. If they are loose, they will not pass.
- No weapon may be “weighted”, such as adding metal shot or coins to any part of the weapon.
- Accessories, such as LED Lights and electronics, are approved on a case-by-case basis. They must be embedded under the striking service of the weapon, covered in

some manner so they do not come off, and pass all other construction requirements. Items cannot be created with an accessory if they do not have a match IG item tag.

### **3.3.3 Stiletos**

Stiletos are coreless and must be constructed entirely from Close Cell foam with no hollow interior space and measure no less than 2" thick. Handles / grips may be thinned as an exception to this requirement so long as they are no smaller than 1 ½" thick and don't extend to any striking surface. It must have a 1" wide black strip running the length of both sides of the weapon. A cross guard may be added, but this is optional. Stiletos are very short, so players must be careful to swing with the lightest touch only.

### **3.3.4 Fist Weapons**

Fist weapons are coreless and must be constructed entirely from Close Cell foam with no hollow interior space and measure no less than 2" thick. Handles / grips may be thinned as an exception to this requirement so long as they are no smaller than 1 ½" thick and don't extend to any striking surface". They must be coloured with red duct tape. Fist weapons are very short, so players must be careful to swing with the lightest touch only.

### **3.3.5 Maces/Hammers/Mauls**

These weapons require some kind of Open Cell foam head that would allow the weapon to be clearly identified as a mace, hammer, or maul. If the head does not cause the weapon to look like the weapon type identified on the tag, then it will not be usable with a mace/hammer/maul tag.

### 3.4 RANGED WEAPONS – BOWS, ARROWS, BOLTS & ROCKS

#### 3.4.1 Approved Materials

Only fiberglass and graphite shafts are permitted.

#### 3.4.2 Construction Requirements

Compound bows are not permitted. Bows and crossbows may only have a draw strength of 30lbs at full draw. Boffer arrows for bows may either be homemade or commercially available “high” or “low” speed arrows. Crossbow bolts are constructed identical to a standard arrow.

#### 3.4.3 Safety Requirements

Arrows and bolts must be inspected at every event by a Weapons/Armour Marshal for safety. Additionally, all players must inspect their own arrows for safety before every use during an Underworld LARP event, paying special attention to any picked-up dirt and debris from the arrowhead. Arrows that are wet or frozen cannot be reused until they are dried. You must not aim at the head or groin of a target. Only pull a half-draw on your bow when you are within 15 feet of your target.

#### 3.4.4 Rocks

Boffer “Rocks” may be used as thrown weapons and adhere to the following construction guidelines:

- They must be a general sphere shape.
- They must be built from Open or Close Cell foam.
- They must be sealed with Duct Tape, Plastidip, or other approved materials for sealing weapons.
- They must be no smaller than a baseball (12.5 sq.in), no larger than a volleyball (283.5 sq. in).
- They must be grey in colour.

Weapon	Striking Surface Size (MIN/MAX)	Overall Length (MIN/MAX)		Required Pipe Diameter (Core)	Weapon Damage
		Inches	Centimeters		
Simple Weapons					
Dagger/Knife	≥ 50%	10/22	25.5 / 55.75	0.5" Rigid PVC	1
2-Handed Staff	≥ 50%	54/78	137.25 / 198.0	1.25" Rigid PVC	1
Club	≥ 50%	20/35	50.75 / 89.0	0.75" Rigid PVC	1
Thrown Weapons	100%	4/10	10.25 / 25.5	Coreless	1

Fist	100%	11/13	28.0 / 33.0	Coreless	1
<b>Medium Weapons</b>					
Sword	≥ 50%	20/45	50.75 / 114.5	0.75" Rigid PVC	2
1-Handed Mace/Hammer	8 / 1750 ** (ex: 2" x 2" x 2" / 12" x 12" x 12")	20/45	50.75 / 114.5	0.75" Rigid PVC	2
1-Handed Spear	≤ 50% *	30/55	76.25 / 139.75	1.25" Rigid PVC	2
1-Handed Axe	≤ 50% *	21/43	53.5 / 109.25	0.75" Rigid PVC	2
Arrow	≥ 3" / 7.5cm	-	-	-	2 Body
Claw	≥ 75%	22/28	56 / 71.25	0.75" Rigid PVC	2
<b>Large Weapons</b>					
2-Handed Great Sword	≥ 50%	43/75	109.25 / 190.5	1" Rigid PVC	4
2-Handed Polearm	≤ 50% *	55/77	139.75 / 195.5	1" Rigid PVC	4
2-Handed Axe	≤ 50% *	40/77	101.75 / 195.5	1" Rigid PVC	4
Bolt (2 Handed Crossbow)	≥ 3" / 7.5cm	-	-	-	4 Body
2-Handed Mace/Hammer	91/3900 ** (ex: 4.5" x 4.5" x 4.5" / 15.5" x 15.5" x 15.5")	40/61	101.75 / 155.0	1" Rigid PVC	4
<b>Exotic Weapons</b>					
Stiletto	≥ 50%	11/13	28.0 / 33.0	Coreless	1 Body
2-Handed Maul	512 ** / 5.75 *** (ex: 8" x 8" x 8" / 21.5" x 21.5" x 21.5")	60/72	152.5 / 183.0	1.5" Rigid PVC	5
1 or 2 Hand Bastard Sword	≥ 50%	40/56	101.75 / 142.25	1" Rigid PVC	2 (1H) / 4 (2H)

\* Striking surface must be a minimum of 4" long

\*\* Cubic inches

\*\*\* Cubic feet

### Fiberglass Core Reference Chart

**All fiberglass cores must be round and may be hollow or solid.**

Total Weapon Length		(Recommended ) Minimum Core Thickness	
Inches	Centimeters	Inches	Centimeters
Up to 28"	Up to 56.0cm	5/16" core	0.8cm core
Between 28" and 55"	56.0cm - 139.75cm	1/2" or two 5/16" cores	1.3cm or two taped 0.8cm cores
Over 55"	Over 139.54cm	5/8" or two 5/16" cores	1.6 cm or two taped 0.8cm cores



## 4 SHIELD CONSTRUCTION & RULES

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### 4.1 APPROVED MATERIALS

The following materials are approved for the cores of Shields:

- Wood (1/2" plywood or joined solid wood).
- Plastics (plexiglass, corrugated sheets, bin lids, etc.).
- Foam

### 4.2 CONSTRUCTION REQUIREMENTS

- A shield may not have any one dimension longer than 4'.
- A shield may not have more than 10 square feet of surface area on one side.
- A square/rectangular shield can be no larger than 4' x 2'6", and a circular shield can have a diameter no greater than 3'6 1/2".
- A buckler may not be larger than 15" in diameter.

### 4.3 SAFETY REQUIREMENTS:

- If wood is used as the shield core, it must be sanded smooth. Any protrusions from the shield face must be rounded, dulled, and/or covered so they cannot cause injury.
- Shields do not require a foam covering for the shield face for standard use. However, if the shield is to be held while engaging in Red Armband combat, it must have a foam covering over the shield face no less than 1/2" thick.
- Shield edges must be padded with a minimum of 1/2" to 1" of foam to ensure edges are adequately dulled to pressure and no hard edges can be felt. The amount of padding will vary depending on the core material and weight of the shield. *When in doubt, add more padding.*
- The shield must be firm enough to not bend or deform under a normal weapon strike.
- Any protrusions from the shield face must be rounded, dulled, and/or covered so they cannot cause injury on impact.

## 5 ARMOUR CONSTRUCTION & RULES

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### 5.1 ARMOUR POINTS & QUALITY OF ARMOUR

There are four basic criteria on which Armour Points will be awarded:

1. Coverage
2. Grade
3. Materials
4. Quality

Blue zones shown on the “Armour Coverage Location” chart only require 50% coverage to obtain full points. All other armour locations must have a minimum of 75% coverage.

When you log in at an Underworld LARP event, your armour will be evaluated by a Marshal to determine the *coverage, grade, materials, and quality* that your armour provides. The Marshal will judge each of your armour pieces to determine their Armour Point (AP) value for their grade and restrictions or will apply a ½-point or 1-point penalty/location of coverage to them. It is possible that your armour is so inferior that it receives a zero armour value. The following list will help you know what sort of things will cause your armour to be graded as less than full value:

### **5.1.1 Point Deductions**

- Any armour made from aluminum, titanium, copper, or other soft metals will receive a full point penalty.
- Any armour made from ANY lightweight alloy (such as zinc, roofing tin, street signs).
- Any armour that shows very poor craftsmanship.
- Any leather or cork armour that has been layered together to reach its minimum size requirements.
- Any grade of armour that does not qualify for coverage but does so if combined with another grade on the same location, shall be marshalled at the value of the lowest grade.

### **5.1.2 Ineligible Armour / 0 Armour Points**

- Any armour in a White Zone that does not cover at least 75% of the armour location will not be receive points.
- Any armour in a Blue Zone that does not cover at least 50% of the location will not be receive points.
- Any armour that is of obvious modern clothing or components (such as leather trench coats, hockey padding etc.).
- Any armour that does not meet the minimum standards of the grade (leather <4oz/1.6mm, plate <1.mm).
- Any armour constructed with materials that do not match the grade requirements.

Note: Each layer of armour will only ever be subject to one penalty per location; whichever penalty is higher shall apply.

## **5.2 ARMOUR GRADES**

There are four basic grades of armour, and each of these is worth a different number of armour points (AP). Each piece of armour will be designated as one of the following types:

### **Grade A: 1pt./location.**

Permitted Materials: Leather, Layered Leather, Cork Leather.

All leather must measure at least 4oz / 1.6mm in thickness or more to be graded as full value.

Any single layer armour thinner than this cannot be used. Layered leather must be built from no more than two pieces of leather, each measuring no less than 2oz / 0.8mm. Layered leather of any type receives a 0.5 deduction per location.

### **Grade B: 2pts./location.**

Permitted Materials: Studded Leather, Hardened Leather, Steel-boned leather corsets, Wood.

All leather must adhere to the thickness requirements in Grade A. Grade B Leather may not be layered.

- *Studded* is defined as leather with studs, grommets or rings attached to it no more than 2" apart.
- *Hardened* is defined as leather that is boiled or cured to the point of rigidity, which retains its shape while acted upon with moderate force, and able to maintain a load of 5 lbs. without bending.
- *Leather Corsets* if possessing a steel boning will also be graded as full value if the boning is no more than 2" apart.
- *Wooden* must be constructed with real wood rather than chipboard or plywood, be at least ½" in thickness and be varnished or lacquered.

### **Grade C - 3 pts./location.**

Permitted Materials: Chainmail (steel and aluminum).

Links of metal chain woven together, no less thick than 18-gauge wire, with inner ring diameter of 1/4 ", using European 4-in-1 design (where each ring is connected to four other rings) or an interlocking woven design of greater complexity, such as Full Persian 6-in-1. 16-gauge wire with inner ring diameter of 3/8" or any gauge /diameter with an aspect ratio of 6 or less will be graded as full value. Any chain mail constructed of wire thinner than 18ga that meets the aspect ratio of 6 will be considered 'micro mail' and be assessed a value of 2 points per location. Any chain mail constructed of aluminum will be assessed a value of 2 points per location. Micro mail may not be built from aluminum.

### **Grade D - 4 pts./location.**

Permitted Materials: Steel plate, Sectional metal armour.

Steel plate armour is sheets of metal which are formed or not, no less than 1.0mm in thickness. The edges of all plates must be either rolled in on themselves or at least ground and polished smooth and without any sharp points anywhere. Sectional metal armour, such as Brigandine, Lamellar, and Scalemail are subject to the following:

- *Brigandine* (non-overlapping plates) is defined as an armour composed of metal plates attached across a leather or cloth backing. Individual plates must be a minimum of 2 square inches. In order to receive AP, the metal plates must meet standard coverage requirements, independent from the backing material. Due to the gaps between the plates, this armour is valued at 3.5 points per location. Any Brigandine style armour that uses plates under 2.0 sq. in will be assessed as ineligible armour. They may be incorporated as decoration but will not count towards eligible coverage.
- *Lamellar* (overlapping plates) is defined as an armour composed of metal plates attached across a leather or cloth backing, or lashed together with sufficiently strong bindings, which overlap one another. Individual plates must be a minimum of 2 square inches. To receive AP, the metal plates must meet standard coverage requirements. Any Lamellar style armour that uses plates under 2.0 sq. in will be graded as scalemail so long as it otherwise follows the construction guidelines appropriate for lamellar, otherwise it will be assessed as ineligible armour.
- *Scalemail* is defined as an armour composed of a chain backing which is covered in overlapping metal "scales", which must be under 2 square inches each. In order to receive AP, the metal scales must meet standard coverage requirements. Due to the small size of the scales, this armour is valued at 3.5 points per location.

Aluminum cannot be used as a Grade D material, except in the creation of scalemail, which will receive a 1-point deduction.

## **5.3 SPECIAL SITUATIONS**

### **5.3.1 Pteruges & Faulds**

Armoured Skirts, Pteruges, Faulds, and anything comparable are to be evaluated for locations 18 and 19 as if they wrap around the interior of the legs and/or thighs.

### **5.3.2 Garrote Protection**

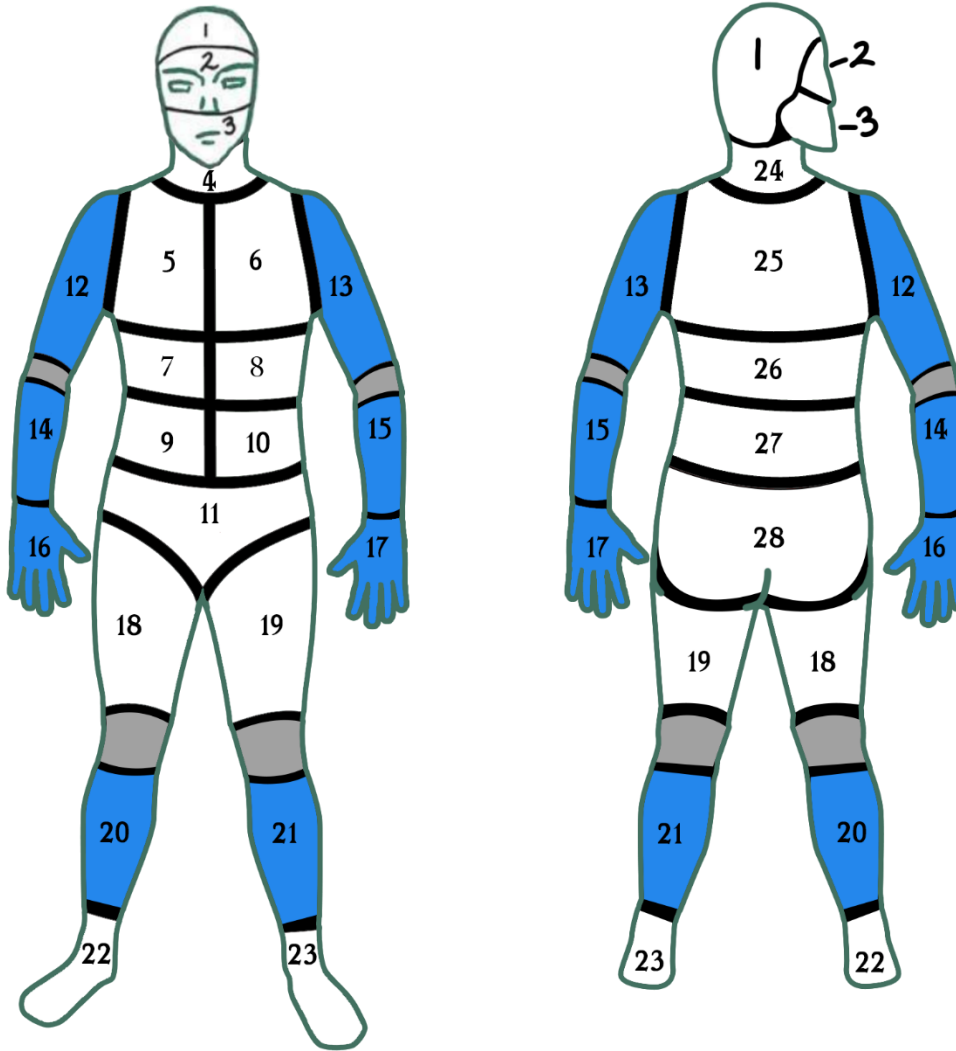
Garrote protection requires a minimum of 2AP covering location 4 (neck). The armour used must have a base value of 2AP; any effects that would increase a lower value armour to 2AP will not be given garrote protection.

### **5.3.3 Special Armour Locations and Coverage**

The elbows and knees of locations 14, 15, 20, and 21 (forearms and calves) are optional, and do not count towards the total location coverage. If a player chooses, they may still cover their elbows and knees to increase their overall coverage percentage, either above or below the armour location.

Footwear and gloves made of real leather are given special consideration, and can be valued as Grade 1 armour, at the Marshals discretion.

## 6 ARMOUR COVERAGE LOCATIONS (“ARMOUR GUY”)



1	Upper Skull	8	Left Ribs	15	Left Forearm	22	Right Foot
2	Eyes	9	Right Abdomen	16	Right Hand	23	Left Foot
3	Lower Face / Jaw	10	Left Abdomen	17	Left Hand	24	Back of Neck
4	Neck	11	Groin	18	Right Thigh	25	Upper Back
5	Right Pectoral	12	Right Shoulder	19	Left Thigh	26	Mid Back
6	Left Pectoral	13	Left Shoulder	20	Right Calf	27	Lower Back
7	Right Ribs	14	Right Forearm	21	Left Calf	28	Gluteus