

Magical Masonry

The Mason's Blade

Perdo Terram 15 (Concentration)

The caster can direct an invisible and insubstantial “blade” up to one yard in length, which extends from their fingertips. This slices through stone at a speed of one yard per round (or slower if the caster wishes) creating a gap about the same thickness as a sword's blade. If the caster can stand on two sides of a block (e.g. north and east sides, south and top, etc.) then they can cut regular rectangular or square blocks; if cutting from one side, then diagonal cuts are required to remove blocks. (5 levels / 1 magnitude greater than Fist of Shattering, to allow for Concentration duration.)

The Wizard's Cart

Rego Teram 15 (Concentration)

The caster can lift an object so long as it and anything atop it is no heavier than one cubic meter of granite and no larger than the total objects that could be loaded onto a normal horse-drawn cart. The items can be moved around at walking pace, and can move up to 15 yards away from the caster. If the object travels beyond that range it drops. The name is based on the notion that if the caster can walk and concentrate at the same time then they can transport a cart-load of materials.

Masonry Craft skill: In the middle ages the master mason was the architect and engineer as well as a skilled stoneworker, and so a single Craft skill can cover both the planning and execution of any stone-based building project. This is true whether the mason is mundane, or a mage. To hew stone from inside a cliff to make a hollow chamber may not require much skill, but planning and carving appropriately shaped and sized blocks, and then arranging these into robust constructions, certainly does. For simplicity, assume that to plan and execute a simple one-story building requires Intelligence + Masonry Craft of at least 4 (before any die roll); building 2-3 stories requires a total of at least 6; building large towers or any structure which uses only stone (i.e. no wooden beams etc.) requires Intelligence + Masonry Craft of at least 8 (before any die roll).

A Season's Work

Using the two spells and skill noted above, a mage could work as follows.

This assumes that the mage is quarrying stone from a bed of solid rock adjacent to the location where any construction is to be raised, or that other means will be used to transportation stone (i.e. the mage is assumed not to be “walking” each block of stone over any significant distance). This is an abstraction, not a mathematically calculated result – this is the Art of Magic, not a maths puzzle.

Building Chambers and Rooms

Per season the mage can:

- Excavate an area of stone 30 feet by 30 feet by 9-12 feet (e.g. a ten-yard-across, up to 4 yard tall chamber, with columns and arches at its sides as desired).
- Rearrange such stone to create 1-4 additional chambers of the same dimensions.
- If “1 underground and 4 built chambers” is the maximum viable area, then for simplicity assume that simple excavation (carving out the chambers and then dumping the stone over a handy nearby cliff, or carving out chambers and piling up stone for mundane workers to haul

away) would allow the excavation of 5 built chambers per season.

To calculate the number of above-ground chambers raised assume the following:

- Base, 1 chamber. This assumes only the finest stone is used (no blocks with faults or structural weaknesses), and that all parts of the chamber are made entirely from stone. Stone slates sit atop stone beams which rest on stone arches (which were supported during construction on stone scaffolding) on stone pillars between stone walls.
- +1 chamber if wood and/or thatch roofing is used instead of stone, or if a flat wooden roof/floor (as at the top of a tower) is built instead of a pitched roof. (This assumes that other workers are available to transport and raise such.)
- +1 chamber if wooden pillars, braces and beams, are used instead of stone arches etc. (Also assumes workers and materials are available.)
- +1 chamber if stone is used regardless of quality, including blocks with faults and cracks. (In this case at least two of the chambers must be single story only.)

Building Walls

Similarly, rather than excavate a “chamber”, a mage could excavate a pit, and then construct a wall as a fortification. Since the building of walls does not require so much fine consideration as a room, assume that the mage could, in one season:

- Excavate an area 60 feet by 30 feet by 10 feet deep (or 30x30x20, or 20x30x30, etc., as the mage wishes). And
- Use that stone to build walls 10 feet thick, 30 feet high, 60 feet wide (or 20 feet thick, 30 feet high, 30 feet wide, etc.). The wall could have crenelations on the top if desired.

This assumes that the walls are being built onto/into rock. If built on/into earth, one third of a castle wall's height must be foundations.

To expose bare stone, earth can be cleared away by mundane workers or with magics such as Pit of the Gaping Earth. Exposed stone areas will not be conveniently smooth, so creating a flat stone area (large enough for a smallish castle or moderate sized covenant) from a roughly flat-ish area also requires a full season using the Mason's Blade spell above.

Botches and Mastery

If using these spells throughout a day might require 50-100 spell castings, then most days the caster will botch once per day. Since botches when destroying or levitating lethally large blocks of rock are likely to be severe, this probably means that each season the caster will accidentally demolish or ram blocks into a couple of neighbouring buildings, inadvertently create a couple of inconvenient pits, and drop rocks on / kill a couple of workers (or themselves). This is not practical. So using the spells regularly presumably requires the Mastery of the Spells.

If a mage needs to remove any significant amount of soil before getting to the rock (not an issue if building on a rocky crag, but a significant problem on a low hill where the depth to bedrock may be more than a few meters) then whatever spell is being used to remove the dirt (e.g. Pit of the Gaping Earth) will also need to be mastered.

Acquiring the Spells

Inventing the spells is the obvious route.

It is also reasonable to assume that these or similar spells will be found in the libraries of many powerful/established covenants, and could be traded for.

Example Build: 1

A young covenant is currently based in a series of huts on a small plateau half way up a cliff. It is cramped, wet and miserable. So they choose to tunnel into the cliff to create quarters for their four magi.

Therefore they excavate:

- One entrance/guard chamber
- One Council Chamber beyond that
- One Library / treasury chamber beyond that
- Four sanctums (two each flanking the council chamber and library respectively) each comprised of two chambers (one living quarters, one laboratory)

This totals 11 chambers

With a Masonry skill of 4 and an Intelligence of 1 the mage doing the work can't build entirely stone buildings, so they have the covenfolk drag some timber up from the woods below and build a dozen single-story stone, slate-roofed huts for their few covenfolk. Surplus stone is then dumped over the edge of the cliff.

This takes 6 seasons.

- 4 seasons for the first four chambers and the external huts.
- 2 seasons for the remaining 7 chambers.

Example Build: 2

A group of magi travel to the edges of civilization to set up a new covenant, and seek an agreement with a local lord / tribal leader to allow them to settle unmolested, and free from rents or obligations. The lord agrees if they will build him a stone tower (a rare thing in this wild region).

Therefore the magi find a rocky hilltop with no significant topsoil on its craggy summit. There they excavate four sixty foot pits, in a square, levitating the excavated stone up to form ten foot thick, thirty foot tall walls, arranged in a square (leaving a gap for a door, of course). They have built a keep with a trench/moat around it.

They then excavate four "half pits" at the corners to complete the stone trench around the keep, and use the stone to build habitable rooms within the shell of the keep.

This takes six seasons.

Defending Structures

If a mage spends 2-10 years building a fine stone stronghold, it would be infuriating if any jumped up lord with a trebuchet or stroppy Flambeau mage with the End of the Mighty Castle spell can come and knock it down. And if this is infuriating for a mage then it is doubly enraging for a mundane lord who might have spent hundreds or thousands of pounds of silver on years of construction of their castle.

The main threats to a stone structure are magic, large projectiles moving very fast, and undermining (i.e. building castles under a wall to make it collapse). A fourth danger would be fire, which is why avoiding wood as far as possible is advised; entirely wooden castles are much more vulnerable, but if an attacker can start a good blaze then furniture, beams, floorboards, etc. can all burn ferociously enough to gut a part-wood, mostly-stone tower.

For a mage, Aegis of the Hearth is the standard magical defence. A covenant's walls are usually covered by the Aegis, giving them a magic resistance.

For anyone, magical or mundane, building from a tough rock which lacks cracks or fissures gives a more durable structures. A trebuchet's stone is more likely to damage sandstone than granite, for example. Likewise, siege engineers, who know how to dig mines against walls, also have techniques to frustrate others' mines.

Of course, magi can also use magics to buff their constructions against physical attack.

This all sounds as if everything is stacked in favour of those who draw power from the realm of magic. But there is no reason why the other realms should not be just as capable of defending themselves.

No doubt a powerful faerie lord or lady could weave effective protections over a structure, although the inhabitants might not want to pay the price or face the uncertain consequences. Any such faerie protection would depend upon the nature of the fae in question.

The forces of hell no doubt can protect their adherents, if they choose to.

The question then remains of how the Divine might protect its people....

In the medieval mindset it is understood that God ordained that the rulers should rule and the serfs should serve. A lord does not hold a castle simply because he is the most effective thug in the are (though he may well be) but also because God has ordained that he should rule; a cathedral is not just a big stone barn, but a connection to God. This is conceptualised in different ways. Some clergy argue that there are three orders – the shepherds (them), the sheep-dogs (the nobles) and the sheep (everyone else), a distinction which neatly suggests that the nobles are their servants (few nobles will fall for that). Kings often have themselves anointed with holy oils while being crowned by arch-bishops, to make the point that they are God's anointed rulers of the people. But whatever rituals and theories may be employed, everyone knows that the caste-based order of things is ordained by God. So it should be no surprise if the strongholds of those anointed by God, the hubs from which they maintain God's desired order over the world, should be defended by Divine power.

This raises the question, of course: which lords, exactly, does God defend? All nobles, even as they wage war on one and other, claim to hold their lands by the grace of God, and will swear oaths in His name while imploring that the Saints bless their violences. So who is truly blessed? The rule of thumb should be this:

- If this castle is held by a faithful ruler, ordained by God and living in virtue and obedience, as

guardian of the pious people, then no mage nor faerie nor demon is going to be able to damage his castle. This is the order that God ordained, and God's power will protect it.

- On the other hand, if a blaspheming usurper had unlawfully seized a castle, has been excommunicated by the pope, is defying his overlord, and is now indulging in all manner of sins while his peasants embrace heresy, then there is no divine protection here. This is not the order that God has ordained.

Appendix: Divine Resistance Rules

That the bastions of Christian order are shielded by the divine does not, of course, mean that no magics work in castles etc. If the divine is defending the ordained order, this does not prevent a whole range of free human actions within its realm. The key question is: is the ordained order under attack? Trying to destroy a castle is an attack on the physical fabric of that order; casting *Pilum of Fire*, or *Aura of Ennobled Presence* is simply a human action.

If players try to pick loopholes in this then just remember that the power and wisdom of God is greater than that of the rules-lawyer trying to find loopholes in RPG systems. And ultimately: this is a game where magi live on the fringes of a feudal world; it is not a game where magi lord it over impotent mundanes; rules-fudges to keep that making sense are to be encouraged.

If you want actual rules for this (do you really? - doesn't *Ars Magica* have enough rules already?!), then try this:

The magic resistance of the "fabric of the ordained order" (e.g. castles, cathedrals) is equal to:

(Divine Aura) multiplied by (a number representing the ruler's alignment with the ordained order)

To calculate that "alignment", total the following numbers:

How close to God is the castle's owner?

5 = as-close-as-you-can-get (Pope, anointed ruler such as the King of France, arch-bishop or bishop)

4 = close direct relationship (e.g. abbot, minor ruler such as the king of Scotland)

3 = quite close (a rightful feudal tenant of the ruler)

2 = clear but not close feudal relationship

1 = the people of the area are trying to be loyal to their overlord, but the castle currently has no owner

0 = unrelated (bandits or a usurper have occupied the castle, or the structure is unoccupied, etc.)

Does the castle's owner stand obediently within the ordained order?

5 = the castle's owner has never broken an oath; has never with-held service from or underestimated taxes due to the overlord; attentively administers the lands to ensure that all tenants and vassals are diligent in their duties; gives prompt assistance is promptly to those who have the right to exercise justice, etc.

... down to...

0 = the castle's owner is in open rebellion against the overlord whom they previously swore to obey, has abandoned his wife and keeps mistresses, extorts money / goods / services from tenants and vassals that they have no obligation to pay, etc.

Does the castle's owner stand in righteous obedience before God and His earthly representatives (i.e. the church)?

5 = the castle's owner defends the rights of the church, pays any dues which he owes promptly, is

supportive of the representatives of the church and efforts to promote the proper running of the church.

... down to...

0 = the castle's owner has been excommunicated and the lands placed under interdict.

How virtuous and pure are the castle's inhabitants?

5 = populations strenuously avoid sin, embrace acts of charity and virtue, observe all correct festivals and fasts and rituals, believe only correct doctrine as preached by well educated priests. When they do stray they make regular confessions before wise and empathetic confessors and then dutifully perform all required penances.

... down to...

0 = the sins enacted daily by a population of unrepentant heretics will make your eyes water.

How virtuous and pure is the castle's owner?

5 = the owner strenuously avoid sin (and has probably sought out an educated confessor or councillor to help him hone his behaviour), regularly makes confession for his minor sins, sincerely does penance for any transgression, performs acts of mercy and charity, supports the spiritual education of the people....

... down to...

0 = the castle's owner indulges in all seven of the deadly sins, performs no acts of charity or mercy, blasphemes in his speech, never makes confession nor feels remorse for his legion of sins, and presides over a castle renowned for its depravity.

This will give you a number between zero and 25. Therefore, in an ideal Christian community the magic resistance from the divine will be = 3 (for the local divine aura) multiplied by 25 = 75 (e.g. for a castle in or adjacent to a town); or = 2 (rural/village divine aura) multiplied by 25 = 50. A cathedral, or the castle of a religious order or bishop, with a higher base divine aura, could have a resistance of over 100. In practice, however, most castles will have much a lower resistance – it is extremely common for lords to quarrel with their overlords, fall into dispute with the church, indulge their sinful urges, etc.

A typical town castle might have a resistance of 50, and a rural baron's retreat might have a resistance of 30. But villainous lords may have little or no resistance and obedient and pious folk enjoy more protection. This will mean that player characters are barely impeded when fighting on the edges of civilization (the brigands who have taken over that abandoned castle have no protection) but that junior magi are unable to easily overthrow kingdoms, and even the greatest magi in the order should be unable to sweep away the strongholds of righteous kings and religious leaders. This will also mean that characters will find it easier to act against the wicked than the virtuous, which may balance the scales a little in a medieval world where brutality and wickedness are frequently the most practical paths.

Feel free to extend this rule, if you wish, to cover not only the great centres from which order is maintained - castles, cathedrals - but also the agents of that order - duly anointed rulers and their tenants in chief, bishops, abbots, etc. You may find that when kings, queens, earls, bishops, etc. are basically invulnerable to magical attack, mind-control, plagues, impersonation, etc., the players will suddenly get a whole new level of respect for the mundane order that God has decreed.