Veterinary Conformation Assessment
Veterinary Grading Guidelines

This guidance outlines the grading criteria for each of the features assessed as part of the Royal Kennel Club Veterinary Conformation Assessment (VCA). Veterinary assessors should refer to this document when carrying out assessments and use the VCA assessment form to record and submit their findings.

Where a criterion includes multiple features, the highest applicable grade should be assigned. Where asymmetry is present and the guidance specifies that this should be considered, the more severely affected side should determine the grade.

Further information about the inclusion of each criterion, the rationale behind it and the supporting evidence can be found in the VCA Technical Report, on our website: www.royalkennelclub.com/vca.

If you have any questions about the assessment criteria or process, please contact the RKC Health & Breeding team at health@royalkennelclub.com.

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Nostrils

Grade 0	Open nostrils: nostrils are wide open.
Grade 1	Mild stenotic nostrils: slightly narrowed nostrils but the lateral nostril wall does not touch the medial nostril wall. After exercise, the nostril wings should move dorsolaterally to open on inspiration.
Grade 2	Moderately stenotic nostrils: the lateral nostril wall touches the medial nostril wall at the dorsal part of the nostrils and the nostrils are only open at the bottom. After exercise, the nostril wings are not able to move dorsolaterally and there may be nasal flaring (ie, muscle contraction around the nose trying to enlarge the nostrils).
Grade 3	Severely stenotic nostrils: nostrils are almost closed. The dog may switch to oral breathing from nasal breathing with stress or very gentle exercise.

Notes

- Taken from Liu *et al* (2016) - same wording as in the Respiratory Function Grading Scheme.
- No formal three minute exercise test, as this is not a respiratory assessment, but assessor can observe nostrils after movement.

Dentition

Grade 0	Scissor bite. The canines occlude normally and the incisors are aligned normally without overcrowding. One or two missing incisors or premolars acceptable.
Grade 1	Level or reverse scissor bite or other minor misalignment of incisors, provided that there is no clear gap between upper and lower incisors when the mouth is closed. Canines must still be normally occluded; OR more than two missing premolars, but the majority of teeth are still present.
Grade 2	Dog that is clearly overshot (upper jaw longer) or undershot (lower jaw longer), sufficiently that there is a gap between the upper and lower incisors when the mouth is closed. If overshot, lower canines do not impinge on the hard palate. If undershot, the lower incisors and canines are not visible outside the lips when the dog has closed its mouth naturally; OR mouth with significant tooth crowding so that multiple teeth overlap or are displaced from their normal location, but the canines are in normal alignment; OR mouth where canines are in normal apposition but there are a large number of missing teeth, including both upper and lower jaws.
Grade 3	Dog that is clearly very undershot or overshot. If overshot, lower canines are impinging on the hard palate. If undershot, the lower incisors and canines are visible when the dog has its mouth closed naturally;

	OR narrow lower jaw such that lower canines impinge on the hard palate even if jaws are of a similar length; OR mouth where the canine teeth are displaced from their normal location (e.g. tusk-like rotation); OR mouth where there are a large number of congenitally missing teeth, including both upper and lower jaws and at least one canine. If one of these features is only present unilaterally because of a twisted jaw, this is still a Grade 3.

Notes

- The assessor is not expected to count every tooth, just to observe jaw occlusion and get an overview of dentition. If teeth have been removed through dental treatment, a veterinary letter can be accepted as evidence that they were previously present.

Facial skin folds

Grade 0	No lip, facial or nasal folds. Underside of upper lip does not overhang jaw (mucosa is not visible when mouth closed). Fine wrinkling that changes with the dog's expression is accepted.
Grade 1	Any elevation of the skin over the nasal bone that sits well clear of the eyes and is separated from the caudal edge of the nose leather by a non-elevated strip of haired skin extending back from the caudal edge of the nose leather, which is clearly visible without handling; AND/OR pendulous upper lips, so that the buccal mucosa is partly visible when the mouth is closed; AND/OR small lower lip fold such that the two skin surfaces of the lip fold are apposed but the lower lip itself does not hang downwards below the line of the mandible.
Grade 2	Facial folds that extend around the eye sockets on one or two sides (above and laterally), without touching the cornea, or vertical skin folds on the sides of the face, lateral to the eyes; AND/OR any nasal fold that does not touch the cornea but does adjoin the nose leather when observed without handling; AND/OR a heavy lip fold with an associated dewlap, where the corner of the mouth sits below the line of the mandible.
Grade 3	Any facial or nasal fold that impinges on or actually touches the cornea/s or the nares, or that significantly overlaps the nose leather or presses on the eyelid/s;

	AND/OR lips/mouth commissure/dewlaps that hang so low that the two sides touch each other when the dog looks straight ahead.

Notes

- Grade according to the highest-grade feature that can be identified. Obstruction of eyes or nose by skin folds should be considered significant even if the contact only involves hair rather than skin.

Eyelids

Grade 0	The eyelids are well apposed to the globe with no visible palpebral conjunctiva. They do not turn outwards or inwards.
Grade 1	Mild ectropion that corrects when the nose is lifted. A full blink of the eyelids remains possible.
Grade 2	Ectropion that is visible in all head positions but where a full blink of the eyelids remains possible. If the upper eyelid droops, the majority of the eyeball remains visible.
Grade 3	Any clearly visible entropion, **AND/OR** ectropion that is so severe that it does not allow a full blink, or that causes the eyelids to rub on the cornea, or that causes the upper lid to cover the majority of the eyeball when the dog looks straight ahead. Any visible prolapse of the nictitans gland ("cherry eye").

Notes

- If the eyelid is so slightly or intermittently inverted at the medial canthus that the assessor cannot clearly visualise entropion, Grade 2 may be awarded. Any clearly visible entropion must be recorded as Grade 3.

Eye socket & globe

Grade 0	The eyeball sits securely within the socket. The sclera is not visible, or is very slightly visible laterally, when the dog looks straight ahead. Eyelid closure is complete and unimpaired during blinking.
Grade 1	The eyeball sits securely within the socket. A small part of the sclera is visible in up to two quadrants of the globe when the dog looks straight ahead, in the absence of ectropion. Eyelid closure is complete and unimpaired during blinking.

Grade 2	The sclera is visible in three quadrants of the globe when the dog looks straight ahead, in the absence of ectropion. Eyelid closure is complete or only minimally impaired during blinking.
Grade 3	Protruding eyeballs in shallow sockets, where the sclera is visible in all four quadrants of the globe when the dog looks straight ahead; **OR** there is obvious unilateral or bilateral strabismus; **OR** microphthalmia, where the globe is abnormally small and there may be other visible ocular defects; **OR** eyelid closure is obviously incomplete during blinking due to macroblepharon/shallow sockets.

Notes

- Although the grade boundaries describe the appearance as the dog looks straight ahead, the assessor may move the dog's head or otherwise observe the dog using its eyes to evaluate whether there is strabismus.
- If the sclera is only visible because the dog has ectropion, this has already been accounted for under the eyelids criterion. This criterion is intended to assess globe and socket size, and so a dog with ectropion but a normal size globe and socket should not be penalised for visible sclera under this criterion.

Skin folds on body and legs

Grade 0	None
Grade 1	Skin folds over neck, shoulders, back **AND/OR** tail base when dog stands straight, which can flatten out if the dog looks downwards or bends to the side; **AND/OR** slightly loose skin over the neck, body **AND/OR** legs, which does not fold back on itself.
Grade 2	Skin folds over neck, shoulders, back **AND/OR** tail base that persist when the dog bends its neck, body or tail; **AND/OR** any horizontal skin folds on the legs when the dog is standing square; **AND/OR** a hanging "apron" of skin that extends along the ventral thorax **AND/OR** abdomen of the dog when standing.
Grade 3	Skin folds on neck, shoulders, or legs that completely encircle the body or limb;

	AND/OR that are so deep that they overhang; **AND/OR** that do not move as the dog moves; **AND/OR** skin folds on limbs (often the hock) that are so deep that they overhang and form a pocket; **AND/OR** a skin fold that encircles the tail base or vulva (in females), forming a pocket.

Notes

- Grade according to the highest-grade feature that can be identified.

Outward (or inward) turning of the front feet

Grade 0	When the dog is naturally standing four square and looking forwards, the feet point straight ahead or turn outwards very slightly. There is no visible bowing of the antebrachium.
Grade 1	When the dog is naturally standing four square and looking forwards, the feet turn inwards or outwards slightly; **AND/OR** there is slight carpal valgus, but there is no clear impediment to movement or clinical impact.
Grade 2	When the dog is naturally standing four square and looking forwards, the feet are moderately rotated inwards or outwards; **AND/OR** there is moderate carpus valgus, to the point that the dog's movement is potentially affected and there is a likely clinical impact.
Grade 3	When the dog is naturally standing four square and looking forwards, the feet are severely rotated; **AND/OR** there is severe carpus valgus, to the point that the dog's movement is clearly affected and there is very likely to be a clinical impact.

Notes

- The dog may be moved and the legs palpated to facilitate grading. A specific diagnosis of any pathology is not required. If asymmetrical, grade on the worse leg. If other causes are suspected to contribute to pedal rotation, such as severe interdigital cysts, score according to what can be observed irrespective of the underlying diagnosis and note other contributing factors in advisory comments if appropriate.
- Although most angular limb deformities result in turning of the feet, occasionally a dog may have marked rotational abnormalities in the proximal limb, such as obviously abducted elbows that are compromising normal movement, despite feet that still point forwards. In

this situation the assessor may give an appropriate higher grade for this criterion even though the feet are not rotated, but should note their reason for this decision in the general or advisory comments section of the form as appropriate.

Outward or inward turning of the hind feet and hocks

Grade 0	When the dog is naturally standing four square and looking forwards, the feet point straight ahead and there is no inward or outward turning of the hocks when viewed directly from behind.
Grade 1	When the dog is naturally standing four square and looking forwards, the feet **AND/OR** hocks turn inwards or outwards slightly, but there is no clear impediment to movement or clinical impact.
Grade 2	When the dog is naturally standing four square and looking forwards, the feet **AND/OR** hocks are moderately turned inwards or outwards, to the point that the dog's movement may be affected and there is a likely clinical impact.
Grade 3	When the dog is naturally standing four square and looking forwards, the feet are severely rotated outwards **AND/OR** the hocks severely turn inwards (cow hocks) to the point where they sometimes touch each other as the dog stands naturally or when the dog is moved. The dog's movement is clearly affected and there is very likely to be a clinical impact.

Notes

- The dog may be moved and the legs palpated to facilitate grading. If a high grade is suspected, it is highly advisable to move the dog before grading to obtain as much information as possible. A specific diagnosis of any pathology is not required. If asymmetrical, grade on the worse leg. If other causes are suspected to contribute to pedal rotation, such as severe interdigital cysts, score according to what can be observed irrespective of the underlying diagnosis and note other contributing factors in advisory comments if appropriate.

Patella scoring

Grade 0	Normal - patella does not luxate readily on manipulation.
Grade 1	The patella easily luxates manually at full extension of the stifle joint, but returns to the trochlea groove spontaneously when released. The dog may carry the limb intermittently when moving.
Grade 2	The patella easily luxates spontaneously or on manual examination and remains luxated at certain angles of the joint, but can be reduced spontaneously or manually. The dog may carry the limb when moving.

Grade 3	The patella is permanently luxated - if reducible on manual examination it reluxates spontaneously. The tibia is rotated and the tibial crest deviated. The dog does not use the limb normally, although weightbearing may still be possible.

Notes

- Both patellae should be graded, but only the higher grade contributes to the overall score.
- Medial and lateral luxation are scored the same.
- Based on Putnam (1968) and Singleton (1969). Only significant change is amalgamation of Grades 3 and 4 under their system, since both reflect severe abnormalities anyway.

Tail length & mobility

Grade 0	Tail which is long enough that the skin covering the tip at the end reaches at least to the dorsal edge of the ischiatic arch and that is freely mobile with no palpable abnormal vertebrae. Small irregularities in the vertebrae at the tip of the tail are acceptable.
Grade 1	Visible tail that is long enough (measured to the skin at the end) to cover the anus, which is freely mobile and that has no palpable abnormal vertebrae (small irregularities in the vertebrae at the tip of the tail are acceptable), but that ends above the ischiatic arch; OR tail where there are one or more palpably abnormal vertebrae (other than at the tip) but which is freely moveable and where the skin on the end reaches at least to the dorsal edge of the ischiatic arch.
Grade 2	Visible tail that is too short to cover the anus, but which is not mostly or entirely buried in a skin fold; OR tail of any length that has restricted mobility at the base, so that it cannot be readily moved up, down and from side to side, but which does not obstruct the anus; **AND/OR** tail of any length that has one or more obvious kinked bends (which would be visible without palpation on a short-haired dog).
Grade 3	No visible tail; OR an inverted/recessed tail that is mostly or entirely buried in a skin fold; OR a tail that has such restricted mobility that it obstructs the anus.

Notes

- Genetic "screw tails" (DVL2) and "natural bob tails" (T-Box) are both included here.

- If the tail is naturally carried over the back but would clearly reach at least to the ischiatic arch if moved ventrally, it is not necessary to move it into this position to confirm the grading, but the tail should be handled enough to confirm that there are no palpably abnormal vertebrae (other than small irregularities at the very tip, which are acceptable) before awarding Grade 0.
- Below is a table of natural bob tail (NBT) and DVL2 breeds. While the VCA is not breed-specific, assessors may find this a helpful reference to identify breeds where they can expect to find some animals with shortened or absent tails.

Natural Bob Tail breeds	DVL2 breeds
AUSTRALIAN SHEPHERD	BOSTON TERRIER
BOUVIER DES FLANDRES	BULLDOG
(BOXER)	FRENCH BULLDOG
BRITTANY	
CATALAN SHEEPDOG	
HUNGARIAN MUDI	
	KING CHARLES SPANIEL (some shorter kinked tails: causal gene uncertain)
OLD ENGLISH SHEEPDOG	
POLISH LOWLAND SHEEPDOG	
PYRENEAN SHEEPDOG (Long Haired)	
PYRENEAN SHEEPDOG (Smooth Faced)	
SCHIPPERKE	
SPANISH WATER DOG	
SWEDISH VALLHUND	
WELSH CORGI (Pembroke)	

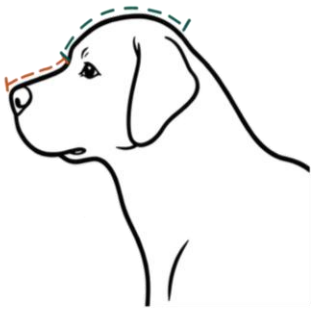
Craniofacial ratio

Grade 0	>0.4
Grade 1	>0.25 to 0.4
Grade 2	>0.1 to 0.25
Grade 3	0.1 or less

Notes

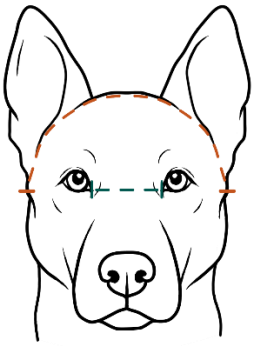
- If the vet is prepared to certify from visual assessment alone that the dog clearly has a Grade 0 CFR, there will be a workaround to allow recording this without measurement. However, this should only be used in exceptional circumstances, as when the dog does not allow head measurement – it is far preferable to obtain full data.
- Measure along nose on dorsal midline from rostral end of nose leather to stop and from stop over circumference of cranium in midline to occiput (i.e. circumferential, not straight line, CFR). Note that the measurement of the foreface is taken from the rostral nose, not the caudal end of the nose leather.

  - Image shows muzzle length (orange) and circumferential cranial length (green)
  - CFR = orange number/green number
  - E.g. if cranium length = 15 cm and muzzle length = 6 cm, CFR = 6/15 = 0.4

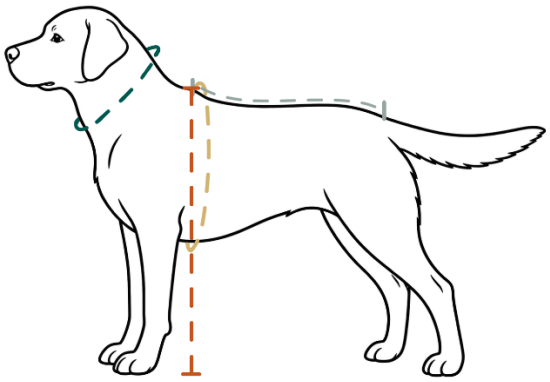


Other measurements

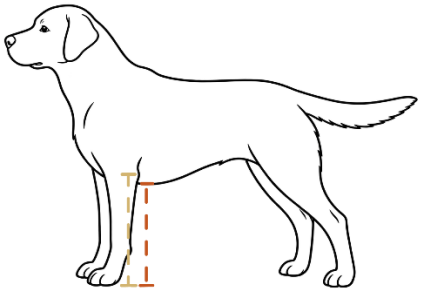
These are currently measured but not scored - there is some evidence of risk of disease but not enough evidence to develop grade boundaries yet. Some are currently being trialled for feasibility. All measurements should be taken with a soft tape measure, or if necessary, may be measured with string or fine ribbon that is then measured on a tape measure or ruler. However, we are currently also trialling the use of a measuring stick (stadiometer) for height at the shoulder.



- Cranial width. The circumferential distance across the top of the head at the widest point from one zygomatic arch to the other.
- Eye width. The straight-line distance between the medial canthus of the left eye and the medial canthus of the right eye.
- Neck girth measurement (Liu et al. 2017) "The circumference of the neck at the median distance between the external occipital protuberance and the point between the cranial angle of the left scapula and the cranial angle of the right scapula."
- Chest girth measurement (Liu et al., 2017) "The circumference of the deepest part of the thoracic cavity."



- Height at shoulder. The linear distance from the ground by the front leg to the cranial angle of the scapula (withers), with the dog standing square, either following the curve of the body (if measured with a soft tape) or taken from a level measure that touches the highest point of the withers (if measured with a stadiometer or height measuring stick).
- Ground clearance at sternum. The linear distance from the ground to the lowest point of the sternum at the midline.
- Length of lower leg. The linear distance from the ground to the point of the elbow (olecranon) with the dog standing square.



- Length of body or back (dorsal) (after Sutter et al, 2008, Liu et al, 2017). The distance along the dorsal body midline from the point between the cranial angle

of the scapulae to the root of the tail.

Note regarding measurement of height at shoulder: *we are currently comparing the two methods of obtaining this measurement, using either soft tape or a measuring stick. These two methods are not interchangeable. A soft tape measurement will be higher than a measuring stick measurement on the same dog, because it follows the curve of the body over the shoulder region rather than measuring the vertical height from the ground. Where possible, we currently ask that assessors use both methods so that we can compare the data. If a measuring stick is unavailable or the dog is reluctant for its use, the soft tape method may currently be used alone, but assessors should ensure that they correctly record which method has been used so that the data is accurate.*

There is a detailed discussion of the scientific background for these two measurements in the VCA technical report. Both have been used in relevant prior research, and both have advantages and disadvantages, with the main difficulties for the soft tape method being the influence of differing shoulder muscularity between breeds on inter-breed comparisons and the need to clarify to owners that this method does not produce the same result as a measuring stick, while the main difficulties for the measuring stick method are that it is currently difficult to source a suitable measuring stick in the UK and that some dogs have disliked this approach in pilot sessions. We will be updating these guidelines in the future as we continue to work through this decision process.

Presence of testicles

- Note whether two apparently normal testicles were observed in the scrotum of male dogs. Note any deviation from this in male dogs under advisory comments.

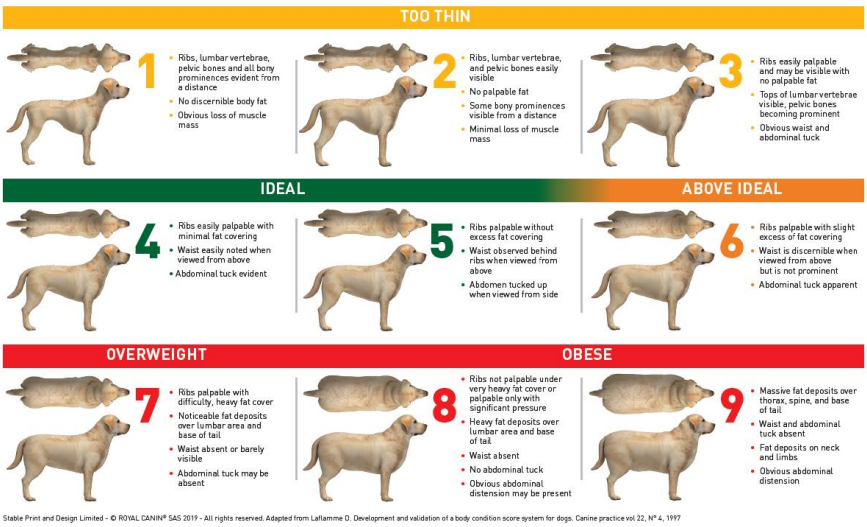
Movement

- The purpose of the movement examination is to assist in grading conformation, not necessarily to fully evaluate or make a diagnosis of any lameness that may be observed.
- Assessors are asked to identify severe impairment of movement that is likely to be ongoing and linked to conformation; for example, "skipping" or "bunny-hopping" linked to patellar luxation, severe cow hocks that brush together as the dog moves away, severe front leg valgus that impedes forward movement, etc.
- Acceptable does not necessarily mean sound. It means that you did not observe a significant problem clearly linked to conformational criteria.

Mild lameness with no obvious cause = “acceptable” (for the purpose of the assessment)
Please record mild issues under “general comments”
“Unsatisfactory” movement should be described under “advisory comments”

Body condition score

To be graded on the WSAVA nine point scale (see diagram below, by courtesy of Royal Canin).



Comments (general)

This optional section is to note points that are not (or not necessarily) breeding concerns, including:

- General positive comments (“lovely dog!”).
- Mild/potentially temporary lameness.
- Other observations that are not clear breeding concerns, e.g., minor comments on body condition or transient problems such as ear infections.

Comments (advisory)

This section is to note further points that are potential breeding concerns, including:

- Breed-specific points of concern not noted elsewhere (e.g. open fontanelle, syndactyly).
- Excessively large/small size, especially when associated with other features of concern (e.g. tiny dog with strabismus and skull shape suggesting possible hydrocephalus).
- Clinical observations that indicate further evaluation under another clinical health scheme – e.g. possible BOAS, cataract.
- Unsatisfactory movement.
- If movement is recorded as unsatisfactory, or if any observed criteria are graded 3, the reason for this should be noted here. If there are no such concerns, the section may be completed with N/A.
- Problematic temperament/behaviour (if severe but not bad enough for examination to be abandoned).
- Obesity (BCS 8 or 9).