Theory of Concretism:

Concrete Art, Concrete Poetry, and Concrete Design.

Axel Rohlfs

Axel Rohlfs (2024): Theory of Concretism: Concrete Art, Concrete Poetry, and Concrete Design.

Dedicated with deep respect to my teacher and mentor, Prof. Eugen Gomringer.

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- Worked as an architect, designer, teacher, artist of Concrete Art and Concrete/ Visual Poetry, assistant to Prof. Vera Molnar (Paris) from 2003 until her death in 2023

- Publications:
see website of the German National Library: **www.dnb.de**
and his own website: **www.axel-rohlfs.de**

1.0 The Concrete in Concrete Art and Concrete Poetry

'Abstract' comes from the Latin word **'abstrahere' = to subtract**: abstract is therefore a copy of a 'model', created by subtracting 'details' from the 'model'; abstract is thus always **'reducing-mediated-indirect'**. Even a naturalistic 'copy' is abstract, since it subtracts the third dimension from the depicted three-dimensional object and also the spatial embedding of the depicted object through the cropping of the image's edge. Ultimately, even a sentence line (as ONE connection between ONE beginning and ONE end) preforms text-medial abstractions = deductions from (probably only guessable) 'real' contingency: 'real' multicausality and multifinality is abandoned in favor of monocausal and monofinal abstractions = deductions.

Traditional poetry resolves this **abstraction dilemma of the sentence line**, for example, through **rhetorical tropes** (as linguistic **'images,'** that is, as **contaminations** of what is said with an absent, mediated meaning to be interpreted) or through **sound contaminations** in rhyme, through the reworking and revisiting of motifs in intertextuality/interpictoriality, etc. **Concrete poetry**, on the other hand, resolves this abstraction dilemma based on sentence line syntax, for example, by means of a **surface syntax** or a permutation syntax. **'Concrete,'** as opposed to 'abstract,´ is that which has not arisen through subtraction in a mediated mediation of an absent 'model.' 'Concrete' is therefore the direct and unmediated nature of, for example, a real stone or of form-color structures, for example, in the medium surface in Concrete Art and Concrete Poetry.

The **concrete element** of both Concrete Art and Concrete Poetry is thus the direct, unmediated nature of something shaped with regard to perceptibility, that is, something that can be grouped according to its design of form and colour. This groupability is based on **syntactic grouping criteria** of **contiguity** and **similarity**, upon which both perceived forms of cognition and rememberable forms of the environment are based: **data organization** by means of contiguity and similarity is a necessity for both cognition and self-organizing processes of the environment; self-similarity in a tree or similarity between two halves of a body, for example, means minimizing data storage effort.

The aesthetic value of the concrete in Concrete Art and Concrete Poetry (i.e., its added value in terms of use compared to the concrete, memorable forms of the environment) is based on its **metacognitive play with grouping criteria**, often on **aesthetic ambiguity** as a playful opposition game of the grouping criteria or groupings based on grouping criteria, which creates awareness of signs and cognition, i.e., metacognition. In a **constructed** image of **Concrete Art**, for example, four constellation groups of four distributed squares within a four-by-four grid could be perceived and distinguished according to color similarity and dissimilarity. Each group of four squares forms a **constellation**, and the four color groups (groupable by four colors) of four distributed squares each constitute four spatially nested constellations, resulting in an aesthetically ambiguous fourfold division of attention. According to **Sklovsky's** 1917 text "Art as Method," perception is thereby **"deautomated,"** referred back to itself, thus establishing a metacognitive reference to cognition. Metacognition (as cognition that has become aware of itself as data grouping according to grouping criteria of Gestalt Psychology) recognizes its own limits and therefore indirectly also what is **absent** within it, what lies beyond its boundaries: **contingency**.

Concrete poetry also contains the concrete, for example, in the form of a **constellation:** Eugen Gomringer's Constellation as a form of Concrete Poetry aesthetically ambiguously divides attention between the (imaginable and then intersecting mental) lines of connection between the nouns distributed over the surface oft he page. The **telic sentence-line syntactics** of traditional poetic verse is abandoned here in favor of **atelic and concrete content-surface syntactics** of grouping possibilities of flatly distributed nouns; attention **fluctuates** between these grouping possibilities, thus focusing first on one, then on another possible connection:

“The constellation is an order and at the same time a space for play with fixed parameters. It allows for play, it allows the arrangement of the word concepts a, b, c, and their possible variations. Thus, for example, inversion only becomes a dynamic element, a problem, within the constellation.” (from Gomringer’s foundational essay on Concrete Poetry, ***“From Verse to Constellation,”*** from 1954, quoted here from his anthology of Concrete Poetry published by Reclam, 2018 edition, p. 254). Gomringer summarizes the concrete as follows: *“With the constellation, something is brought into the world. It is a reality in itself and not a poem about…”* (ibid., p. 255).

The **telic-linear meaning** of verse-line poetry and on the opposite side **atelic content**, as the potential for diverse (and potentially aesthetically ambiguous and opposing) possibilities of connection within the surface syntax of Concrete Poetry and Concrete Art, must therefore be distinguished. Nevertheless, conventional verse-line poetry also exhibits aesthetic ambiguity as a division of attention: rhyme **contaminates** the semantic entities of word meanings in a sound-syntactic way, rhetorical tropes substitute (the uninterpreted) intended meaning with something said that deviates from the rest of the sentence content. Thus, mediation takes place between two entities of the division of attention (what is said versus what is meant)- but this is still placed within a verse line. The verse line preforms meaning as a **succession**, whereas in Concrete Surface Poetry, a **simultaneity** of grouping possibilities exists. In concrete poetry, the white surface of the page becomes the embedding of (textual and cognitive) objects: the semantics of a word bundles many characteristic determinations (semes as grouping criteria), which can potentially all be used for interpretive mediation as a grouping between these noun-textual objects; the word as a concept is interpretively dissolved into the structural tree of its semes, into non-linear and linear sub-concepts, the word concept around the named thing is loosened.

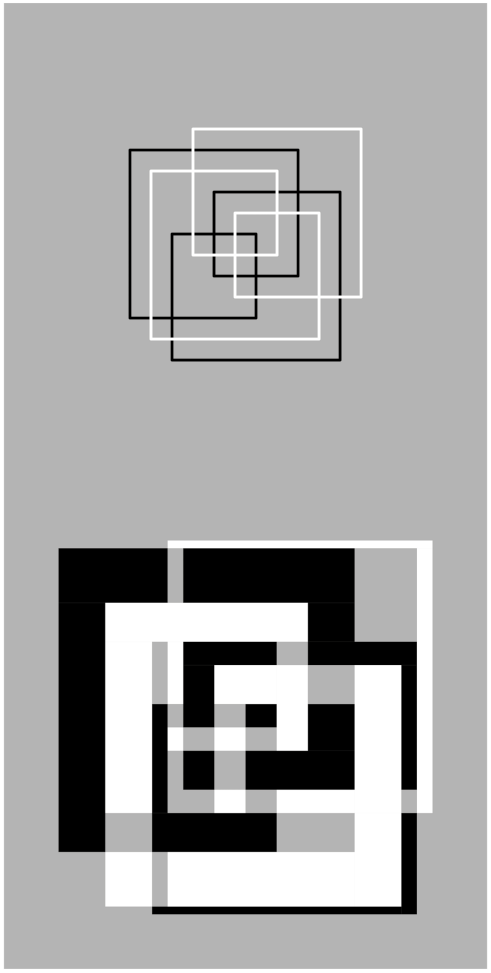
The characteristic aspects of an object or of a situation to be correlated can be subdivided into the following classes according to the metalanguage **MultiNet** (Prof. Hermann Helbig): spatiotemporal embedding, intra- and interobjective or intersituational as well as telic references, and modality. The interpretation of a constellation of Concrete Poetry (as connections between the nouns distributed on the page) thus takes place here in a kind of flow schema of possibilities for mediating grouping by means of characteristic aspects/ grouping criteria. The interpretive lines of connection between words of a Constellation by Eugen Gomringer can be conceived as double arrows, so that with four nouns distributed on the page, twelve mental, intersecting single arrows of connection result between them.

In Concrete Poetry and in Concrete Art syntactic groupings of groupable elements (according to syntactic grouping criteria of similarity and contiguity) are **concrete**. The aesthetics of both are often based on the division of attention across competing grouping possibilities, thus on aesthetic ambiguity as a **de-automatizing counter-organization with regard to everyday perception**, in order to drive cognition towards metacognition: towards the perception of its own cognitive grouping criteria, so that cognition becomes 'floatable' and thus points to what is lacking within it (**contingency, potentiality**, etc.). **Everyday communication** is generally enabled by simple, unambiguous, and delimited forms = grouping possibilities (“Gestalts” of Gestalt Psychology). In contrast, the **special communication** of "art" and "poetry" is often based on a) mixing/**contamination** of and/or b) rhetorical modification operations (adiectio, detractio, substitutio, transmutatio as **deviance** according to **Quintilian**) on remembered entities (within semantics or pragmatics) or on reconstructable simple forms (within syntactics, e.g. a square); both lead to an **ambiguous division of attention** between several mixed/contaminated groupings or between two subsequent entities (deviance: the deviant entity 'ars' versus the entity 'natura' from which there is a deviation).

Cognitively effective geometry is the basis of semiotics: **Linear text** consisting of words with spaces between them (represented by means of sound or “written image" and spaces as separating elements) is based on the **geometry of the dashed line** (spaces and linear word units in a sentence line); the non-linear and non-representational and constructed images of Concrete Art (as a mental index to perception from competing, mutually referencing grouping criteria) is based on a **surface continuum**. The surface continuum of the image medium of Concrete Art and of the “written image” of Concrete Poetry evokes a metacognitive field as a **critique of grouping criteria and therefore of representational signs;** the dashed line of the conventional text medium, on the other hand, enables the representation of time (and, due to the word symbols, also: negation, speech acts, representation of the audible or olfactory, or of the general, etc.).

Concrete Poetry, on the other hand, moves the “written image" away from the conventional, linear, verse-text-like nature of meaning, back to a two-dimensional image, to the constellation-nonlinear and reciprocal two-dimensional syntactics of a **nonlinear content**: to the **multidirectionality**, for example, of a constellation by Eugen Gomringer. Concrete Art and Concrete Poetry often present cognitive grouping criteria in aesthetically ambiguous competition (i.e., as mentally reciprocal index signs of a mutual referencing), thus possessing a metacognitive content of multiple possible and **reciprocally two-dimensional** connections (instead of merely unidirectional, because verse-linear, mediation).

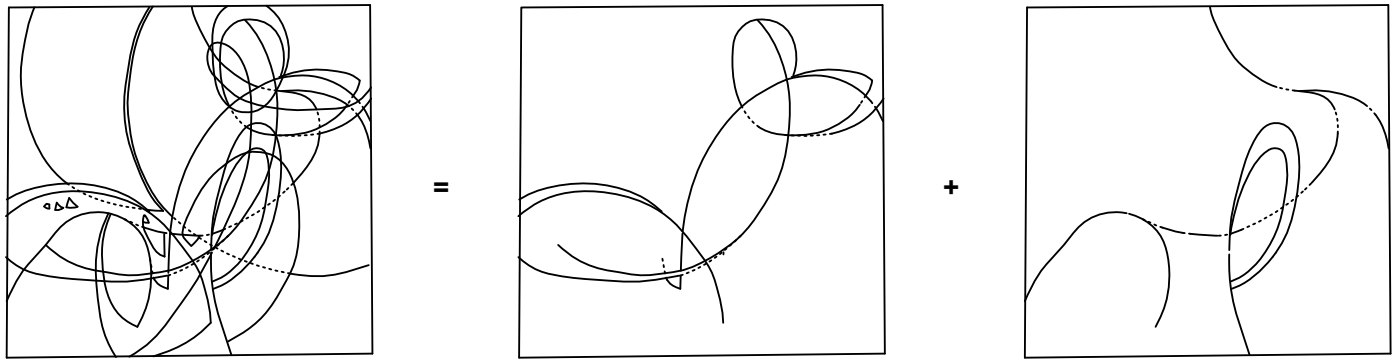
My image of concrete art, "OT 33," shown on this page, refers to the **fundamentally reciprocal character (of mutual referencing) of a surface** syntactic. It depicts two reciprocally forming endless sub-knots of a double-knot: the thickness of the crossing sub-knot determines the length of the other sub-knot it crosses. The two sub-knots thus develop meanderingly into something aesthetically ambiguous, appearing both 'planar' and 'linear'. The gray of the 'overlap surfaces' of the white and black sub-knots is identical to the gray of the ground 'behind' the double-knot; figure and ground are therefore color-contaminated here, as are the one sub-knot and the other sub-knot in their overlap surfaces; in a word constellation by Gomringer, there is also **contamination** by means of intersections: e.g., twelve intersecting connecting lines between four planarly distributed nouns.



Axel Rohlfs: ***OT 33*** *(Oberflächen- und Tiefenstruktur eines Doppelknotens Nr. 33*, English: *Surface and Depth Structure of a double-knot No. 33*), acrylic on canvas, 100 x 50 cm, 2013; see my catalogue *"Tiefen- und Oberflächenstruktur von 66 Doppelknoten"* (English: *"Depth and Surface Structure of 66 double-knots"* (2013, see www.dnb.de).

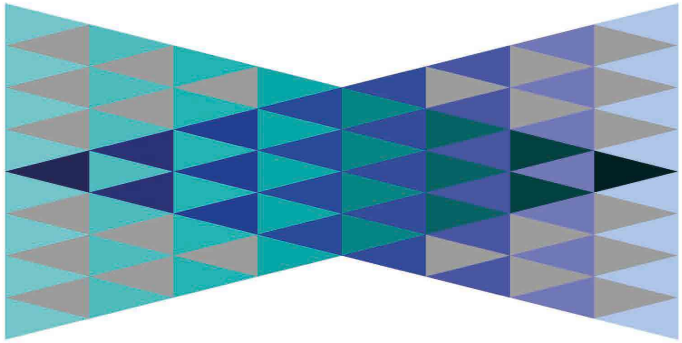
In his 1972 text *“definitionen zur visuellen poesie”* (see ibid., pp. 257ff.), Eugen Gomringer distinguishes, within Concrete Poetry, in addition to the aforementioned *“constellation”*, the following two types of **concrete surface syntactics**, which can be linked to Concrete Art:

1) Ideograms; in his example of an ideogram *“wind”* (cf. ibid., p. 93), Gomringer diagonally interlocks the letters of four word images of *“wind”* in such a way that possible **bifurcations of the reading direction** arise within this letter-image construction, thus directly demonstrating an aesthetically ambiguous splitting of attention in a kind of labyrinth of many conceivable reading path splits; one letter can therefore belong to several *“wind”* word entities (type of aesthetic ambiguity: contamination of several reading lines and of several word entities). Frantisek Kupka’s non-representational painting *“Amorpha”* from 1912 is also based on this **concrete and aesthetically ambiguous geometry of bifurcation as a visualized division of attention**; here is a contour line analysis of this painting:

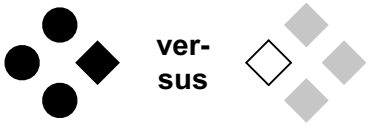
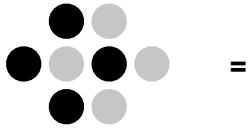
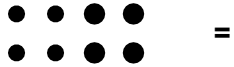
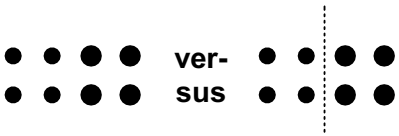


Reconstruction of Frantisek Kupka: *“Amorpha - Fugue in Two Colors”* (1912, colored painting, oil on canvas, 211 x 220 cm, National Gallery Prague)

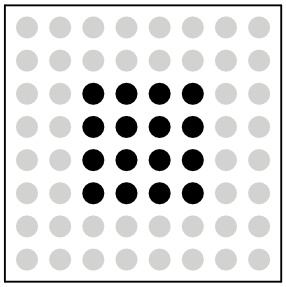
2) Palindromes in Concrete Poetry appear linear at first glance, but they can also be read backwards (with the same or a different meaning). This results in a **geometric-concrete contamination of two possible reading directions: forwards versus backwards,** as in this example by André Thomkins: *"dogma I am god"*. A similar aesthetic phenomenon, but in Concrete Art, would be my work *"Inverse Color Sequence Penetration"* (2004-2018):



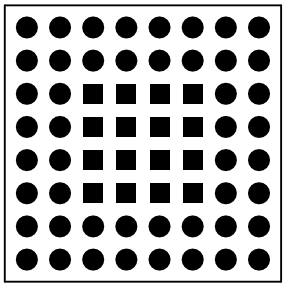
There are **seven types of aesthetically ambiguous surface syntactics in Concrete Poetry and in Concrete Art**, four of which are based on alteration as a deviation **(deviance)** from an orderly schema (like a square), and three on the mixing **(contamination)** of groupability based on grouping criteria. The four **deviance operation types of aesthetic ambiguity** (as 'directing attention to these two sides: 'ars' versus 'natura') are based on Quintilian's rhetoric; however, a second entity can be **integrated** into a first entity ('natura') through adiectio or substitutio, so that the result is a contamination from a deviance operation (hence the overlap area (*) in the table):

Cognitive object(s):	**Operation to produce aesthetic ambiguity as a division of the attention into opposed cognitive entities**			**Cognitive entities in opposition**
Syntactics/ perception of a work	**Syntactic detractio (focus on modality: a 'missing' piece)**	**Syntactic deviance from a scheme as a play with cognition** (*)		
	Syntactic transmutatio (focus on relationality: a 'rotated' piece)			
	Syntactic adjectio (focus on quantity: a piece 'too much')			
	Syntactic substitutio (focus on quality: a piece is 'different')			
	Hybrid H (fluctuation of attention, reciprocity and relativity of criteria)	**Syntactic contamination**		
	Mixture M (fluctuation of attention, reciprocity and relativity of criteria)			
	Minimal Difference MD (fluctuation of attention, reciprocity and relativity of criteria)			

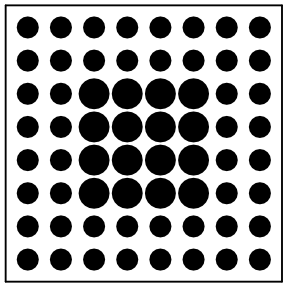
The following eight **syntactic criteria for cognitive grouping** (criteria of similarity S1 to S4 and criteria of contiguity C1 bis C4) form the cognitive base for these seven operations towards aesthetically ambiguous syntactics of surfaces in Concrete Poetry and in Concrete Art:



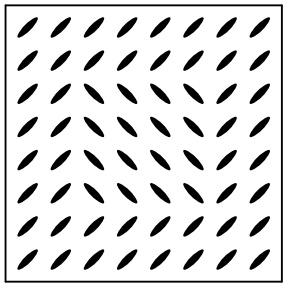
Similarity of colour
(S1)



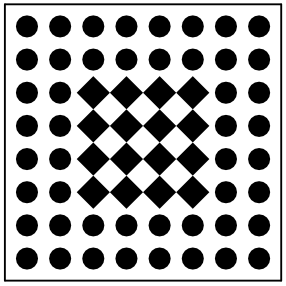
Similarity of form
(S2)



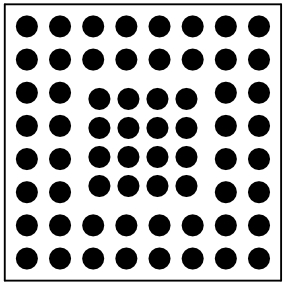
Similarity of size
(S3)



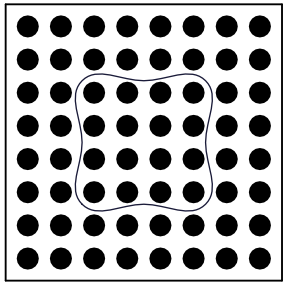
Similarity of orientation
(S4)



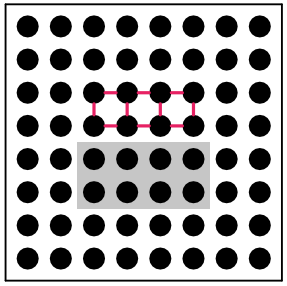
Contiguity of line-direction-index
(C1):



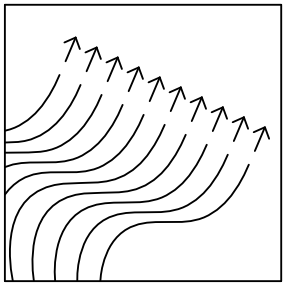
Contiguity of (relative and reciprocal) proximity
(C2):

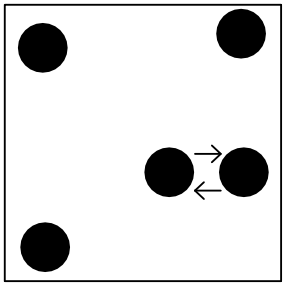


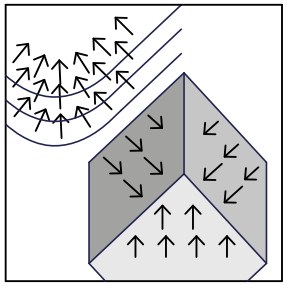
Contiguity of line-curvature-index
(C3):

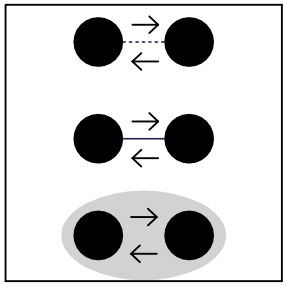


Contiguity of (relative and reciprocal) connexion by points/ lines/ plane
(C4):









A cognitive grouping of these 64 perceptual elements (using the eight syntactic grouping criteria) into the information "figure" (placed "before" a "ground" with less attentional focus) consumes less data in the brain than 64 ungrouped elements of an image. This is the **information-theoretical basis of aesthetic ambiguity** (defined as the intertwining of at least two grouping possibilities as data packages). In aesthetically ambiguous artworks, **the processing of data into data packages through simplifying grouping** is counteracted: attention is divided between at least two cognitive entities/data packages (Latin "ambigere" = to drive in two directions, here meaning an ambiguous driving of attention in two directions/two data packages). Instead of data simplification, ambiguous duplication, tripling, etc., occurs, in order to metacognitively point to cognitive grouping itself as a principle.

The **image parameter C1** shown above can have a visual effect in the direction of a line or a surface, since a surface can be conceived as a family of lines (see first image in the last row of images on page 6); the **image parameter C3**, on the other hand, can have an effect on the inside of a curved or angled line, a curved surface, or two/three angled surfaces (inner corner of a cuboid) (see third image in the last row of images).

In particular, the image parameters S1 to S4 form the basis of **nonlinear perceptions** of the artwork, since perception is also capable of grouping similar elements nonlinearly; the image parameters C1 to C4, on the other hand, form the basis primarily of indexical-linear perceptions. To clearly **delineate a grouping X** of image elements, one can create **dissimilarities** and **discontinuities** with the surrounding elements as cognitively noticeable boundaries; these dissimilarities are also called ***"contrasts."*** **Color contrasts** (> DisS1) are achieved by choosing two colors that occupy opposing positions in the **mental space of the color sphere** (the color circle's equator with a white and black pole). According to Johannes Itten, there are, for example, complementary contrasts (opposite positions on the equator of the color sphere), brightness contrasts (across the equator), warm-cold contrasts (turquoise versus dark orange of opposite equatorial regions), quality contrasts (equator versus non-equator), etc. **Form contrasts** are based on symmetry/asymmetry (> S2), the number of contour line inflection points, the degree of homogeneity, etc.

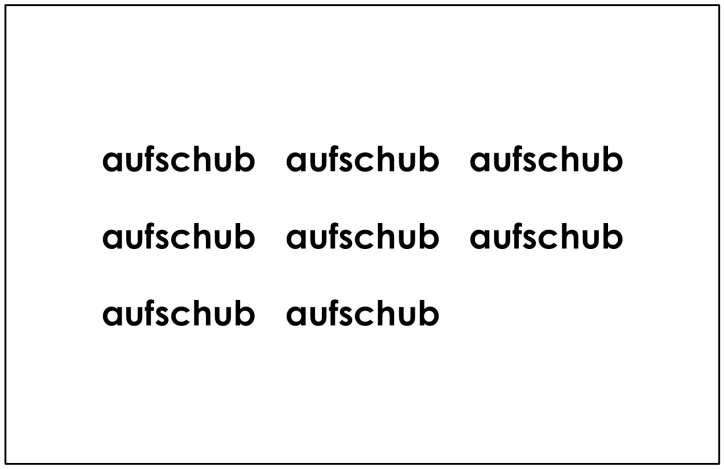
Even in the eight image schemes above for the syntactic grouping criteria S1-S4 and C1-C4, an aesthetically ambiguous fluctuation of attention between various grouping options can be observed, for example, in case S2, the similarity of the color (> S1) of 'quasi-figure' (16 elements in the middle) to 'quasi-ground' (48 elements all around) leads to S1 **versus** (Dis)S2 competing, thus creating an ambiguous duality in consciousness: a visually unifying color 'black' (S1), but different, separable forms (DisS2) 'squares' versus 'circles'.

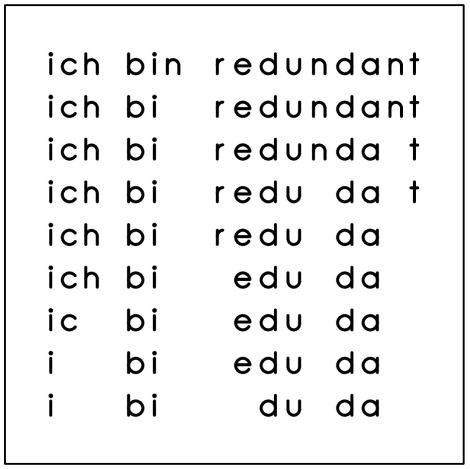
Gestalt principles, as image parameters, usually appear simultaneously in an image and always **interact**; **optical illusions** are based on this **interaction of syntactic grouping criteria**, which leads to a fluctuation between assimilation to the image as a whole and isolation of a part of the image, resulting in two ambiguously opposing perceptions: 'appearance' from illusionary assimilation versus 'reality' from isolation. However, a striking expression/ grade of an image parameter can "control" its effect, meaning it can be considered individually in an image experiment of image parameter variation; then, for example, one can write:

S1 image parameter grade of a first group (= S1.1) **versus** S1 image parameter grade of a second group (= S1.2).

Examples of my Concrete Poetry are now given for all seven types of aesthetically ambiguous surface syntactics in Concrete Art and Concrete Poetry; as examples of deviance in Concrete Art, one could imagine a redundant structure (like s square as 'natura' from redundancy above in the table) to which something is added, from which a part is taken out, rotated, or replaced (which leads to 'ars' as deviance from ´natura´):

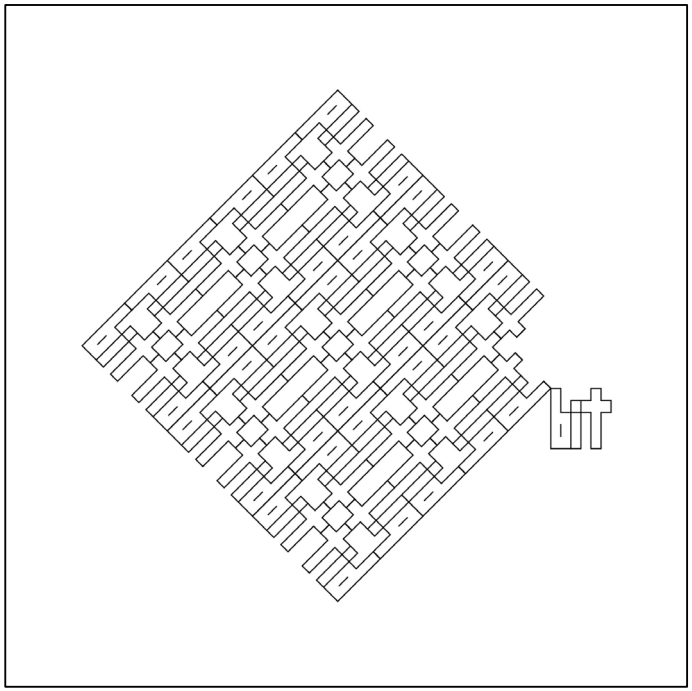
a) Syntactic detractio (German *“aufschub”* > English *“postponement,”* from my book *“through,”* p. 57, 2008) and (German *“ich bin redunandant”* > English *“I am redundant,”* from my book *“what you see is what you get,”* p. 23, 2006); in this sentence, a second sentence gradually and ambiguously emerges from the first sentence: *“i bi du da”* = Bavarian for *“I am you there”*):



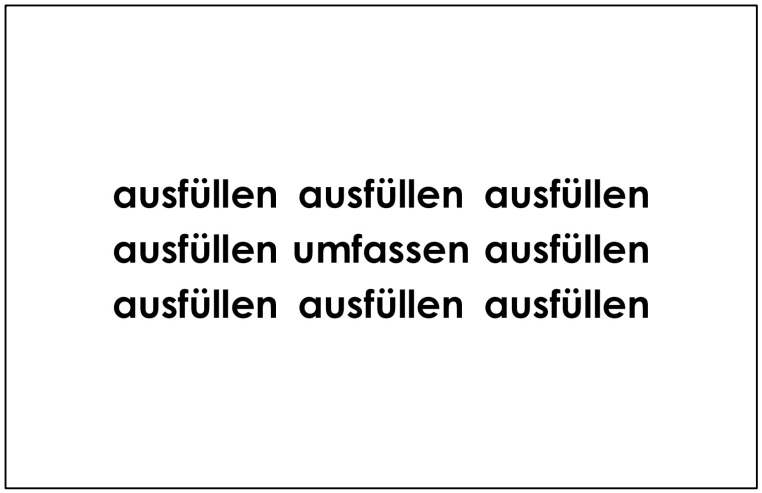


b) Syntactic adjectio (German *„etwas in alles übersetzen“* > English *„translating something into everything,”* from my book *„… und zum dritten*,*“* p. 67, 2011):

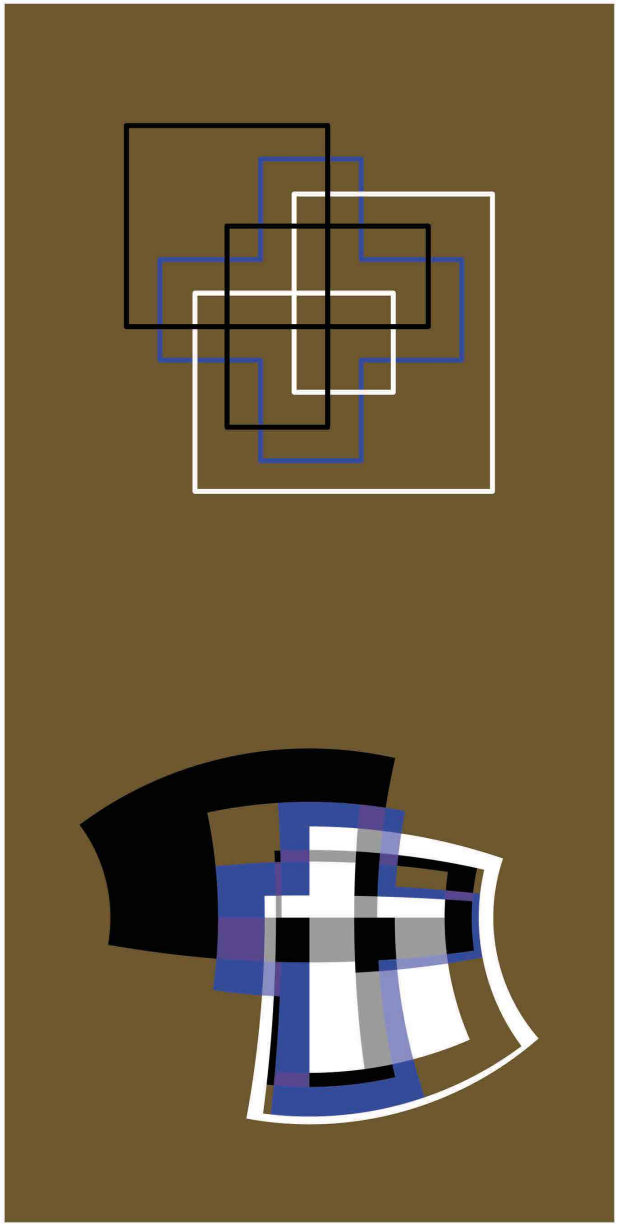
c) Syntactic transmutatio (*“bit,”* from my book *“through,”* p. 33, 2008):

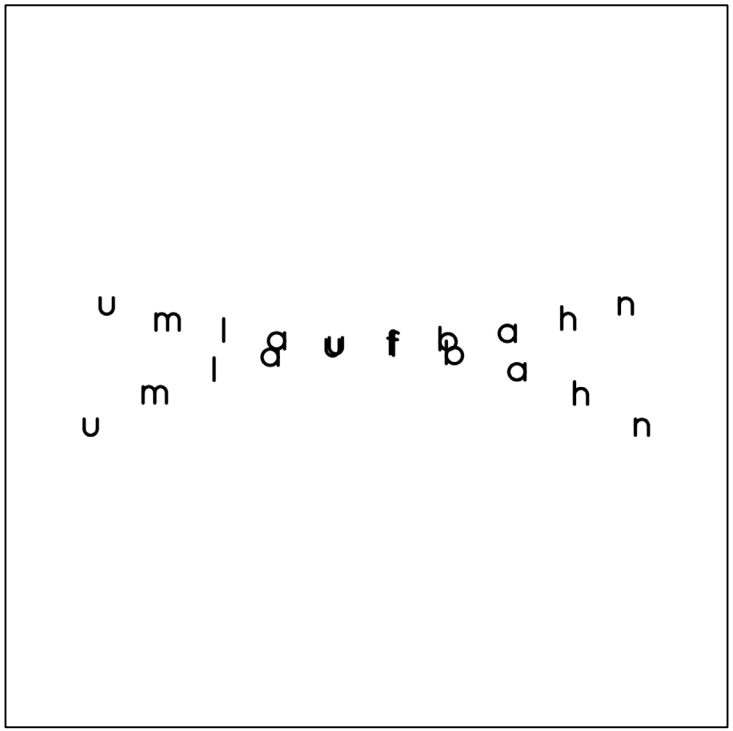


d) Syntactic substitutio (German *„ausfüllen-umfassen“* > English *“fill in- encompass,”* from my book *“through,”* p. 29, 2008):

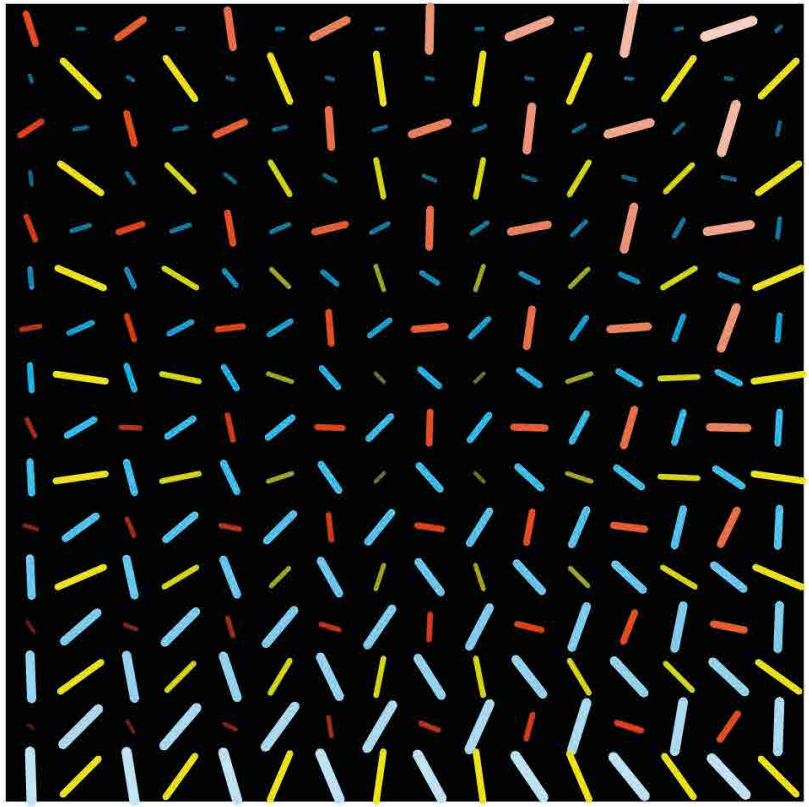


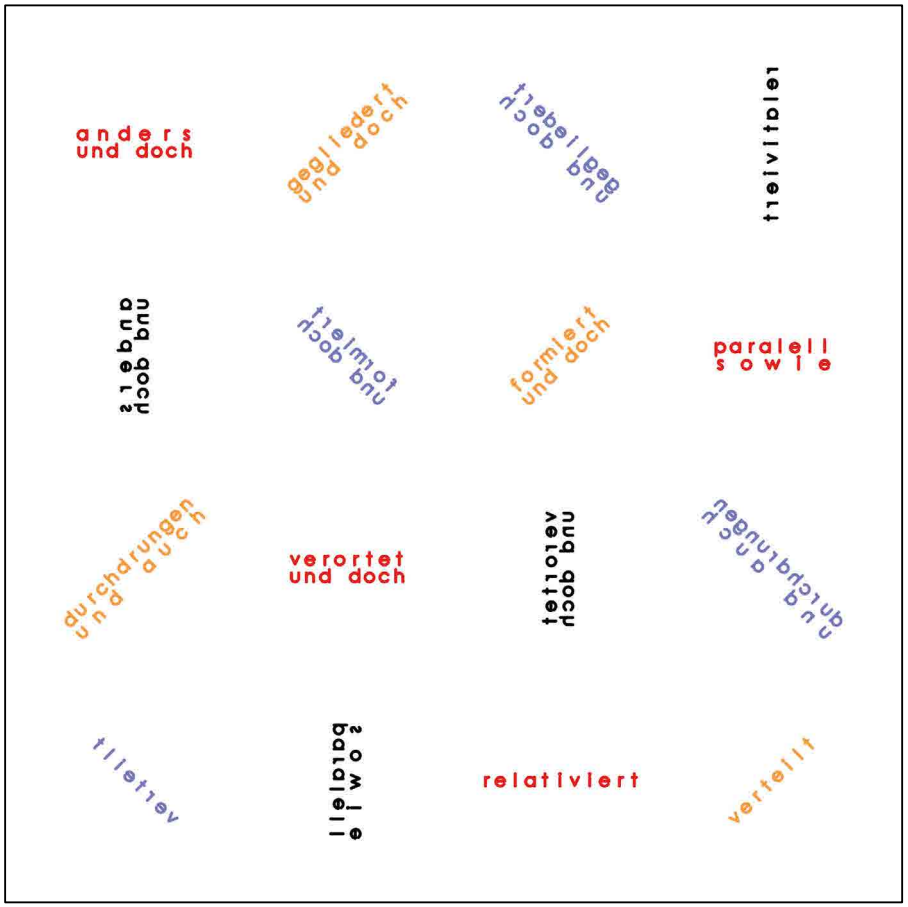
e) contamination (into each other) of syntactic groupings WITH shared (image or textual) elements (e1) *"Triple Knot 17 - 40 - 46,"* 2023, as an example of my Concrete Art and e2) German *„umlaufbahn“* > English *"orbit,"* from my book *"what you see is what you get,"* p. 38, 2006, as an example of Concrete Poetry):



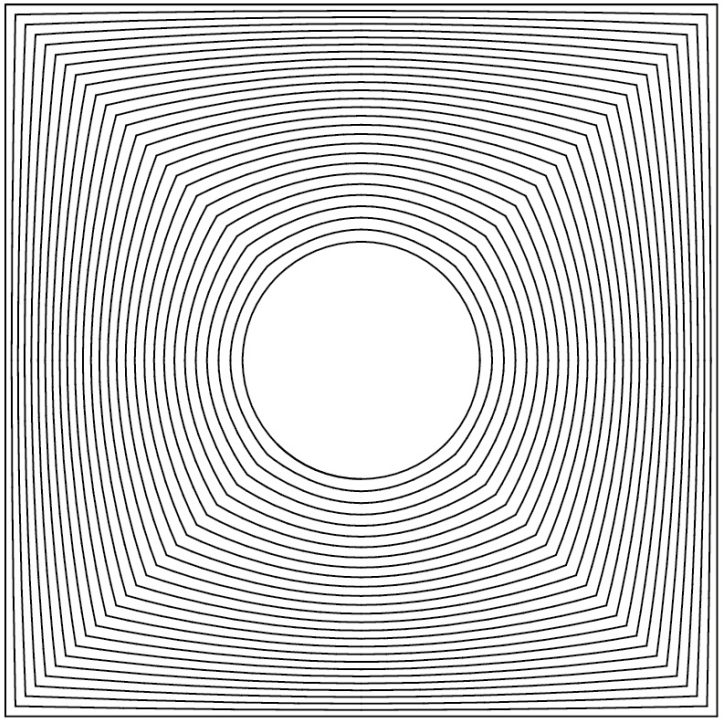


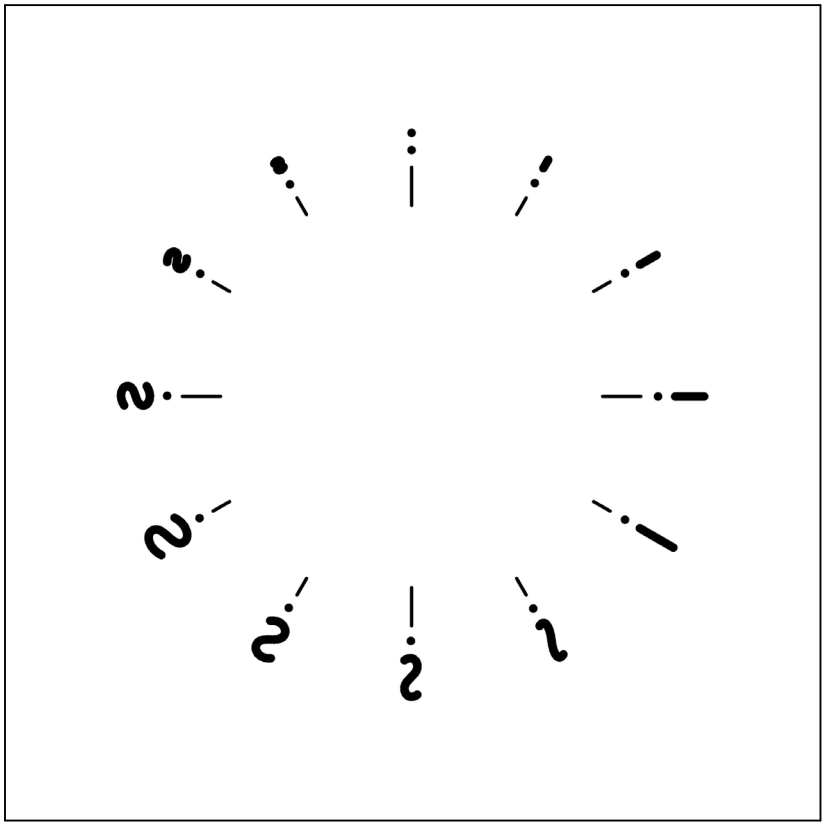
f) Contamination of syntactic groupings WITHOUT common (image or textual) elements
(f1) *"Polyperspectivity PP10"* (2020) as an example of my Concrete Art with three groupings according to the three colours blue, orange and yellow,
f2) German Poem *„anders und doch…"* > English *"different and yet…,"* as an example of my Concrete Poetry with four groupings according to four colours and four orientations; from my book *"what you see is what you get,"* p. 81, 2003):





g) Contamination of entities via minimal syntactic differences (or levels of difference) between the two (g1) *"für riemann"* from my book *"through,"* p. 52, 2008, as an intermediate form between Concrete Art and Concrete Poetry, and g2) *"Bühler,"* from my book *"through,"* p. 62, 2008, as an example of purely Concrete Poetry):





All volumes of my Concrete Art and my Concrete/ Visual Poetry are available online via the website of the German National Library (www.dnb.de <http://www.dnb.de>) and also via my own website (www.axel-rohlfs.de).

2.0 The Concrete in Concrete Design

*"**Do not knock.** - Technologization, for the time being, renders gestures precise and crude, and thus people themselves. It drives all hesitation, all deliberation, all civility out of gestures. It subjects them to the irreconcilable, virtually faceless demands of things. Thus, for example, the art of closing a door quietly, carefully, yet firmly is forgotten. Car and refrigerator doors must be slammed shut; others tend to latch on their own, thus encouraging those entering to adopt the bad habit of not looking behind them, of not being mindful of the interior of the house that receives them. One cannot do justice to this new type of person without being aware of what is constantly happening to them, down to their most secret nerve endings, from the things of their environment. What does it mean for the individual that there are no longer window sashes that can be opened, but only roughly slid-open panes, no smooth door handles but rotating knobs, no forecourt, no threshold to the street, no wall around the garden? And which driver has not been tempted by the power of his engine to run over the vermin of the street-pedestrians, children, and cyclists-into disgrace? The movements that the machines demand of their operators already contain the violent, the striking, the incessantly jarring nature of fascist abuse. The death of experience is due, not least, to the fact that things, under the law of their pure expediency, assume a form that limits our interaction with them to mere handling, without tolerating any surplus-be it in freedom of behavior or in the object's autonomy-that survives as the core of experience because it is not consumed by the moment of action."*
(**Theodor W. Adorno** (1951): Minima Moralia. Reflections from Damaged Life, Section 19).
Abstract and concrete are **scalar** opposites - also in the field of design as preparation for abstract-reduced or, better yet, concrete-maximal **experiences of use, load, and sight**, starting from the **intermediate world between one's own body and the object of use**:
The word **abstract** comes from the Latin 'abstrahere' = to subtract components from a **pre-'image'/ 'pre-object'** as an initial form (= Gestalt = known object or situation) whose content is reduced by subtracting components to a **post-'image'**, an indirect **'post-object;'** the initial concept to which a reducing abstraction attacks is a memorable form (Gestalt), i.e., a memorable **initial concept of semantics** (a known object) in the case of icon images or a memorable **initial action concept of an action in pragmatics** (a known situation). In the realm of the pragmatics of everyday objects (design), there is always the contingent starting point, the "intermediate world" (cf. the philosophy of Maurice Merleau-Ponty), a reciprocal interpenetration of bodily consciousness and the object world. From this **intermediate world contingency** (as the potentiality of a maximum contingency experience of three overlapping realms-use, load-bearing, and seeing-within the Borromean knot), experiential components such as the ´surplus of freedom of behavior or of the object's autonomy as a lasting core of experience´ (according to Adorno's above quotation) are then subtracted in **abstract design**, for example, by means of technologization or by rendering the load-bearing process invisible. "Abstract" thus always means reductive and mediated, because abstraction involves a mediation that subtracts components:
a) between a more detailed **'initial object'** and its abstractly poorer **'post-object'** in the **representing image** or
b) between a more detailed **'initial situation of an intermediate world'** and an abstractly poorer **'post-situation'** in the abstract design.

Geometries of Concrete Art and Concrete Poetry are **immediate, unmediated and unreduced (thus ´concrete´)** which lead to syntactic percepts (by means of syntactic grouping criteria) which show no reduction of potential; the intermediate world-contingency between using body and object of use can reach a high level of concrete directness too: Designing can choose a position on the scale from abstract pole to concrete pole, depending on whether sensory stimuli (as in Adorno's description of the technologization of the modern environment) are extracted (= abstracted from potentially sensuous, experiential, and contingent actiocepts) or not. Based on **Vitruvius**, three partial concepts of action (= **´actiocepts´)** of the use of designed everyday objects can be defined:
a) Actiocepts of **experiencing load transfer**: **'firmitas'** according to Vitruvius, redefined as actiocepts of (concretely more or abstractly less) sensing and seeing the flow of forces on the object of use,
b) Actiocepts of **physical use**: **'utilitas'** according to Vitruvius, redefined as actiocepts of (concretely more or abstractly less) free and sensually perceptible bodily actions on the object of use, and
c) Actiocepts of **schematically unified comprehensibility of load transfer through use**: **'venustas'** according to Vitruvius, redefined via the concept of the visual scheme; the term ´scheme´ is understood - in reference to Kant - as an idea which synthesizes body-space and movement-time as a mediation between space and time which is also 'processually readable' in the object of use.

My ten furniture designs in this volume are all based on the module 'A-Flex' which clearly presents load transfer, use and visual scheme and they are intended to illustrate the idea of concrete design as the **maximum possible (sensual and schematically unified) experience of these three actiocepts intertwined**:

A) In these designs**, load transfer** becomes perceptible in a sensually unreduced, direct, and therefore concrete way through the vivid and tangible static decomposition of the furniture into compression plates, tension straps, and hinges (analogous to the body with its compression bones, tension muscles and tendons, and bone joints acting as 'quasi-hinges'). Body self-awareness is part of the intermediate contingency between the consciousness of the user as subject and the used object, since the body is also partly an object to itself. Abstract design, on the other hand, conceals its statics under upholstery (reducing visibility), and its statics usually consist of unintuitive, massive frame connections instead of a clear static decomposition into tension and compression elements.

B) In these concrete designs, **physical use** becomes sensually perceptible in an unrestricted and direct (= concrete) way through the **flexible, orthosis-like adjustability of the furniture for the more freely moving body**, through the modifiability of the angles and heights of the furniture pieces: an A-Flex module consists of two pressure plates connected by a hinge, held at an angle by a tension strap whose length can be changed. Abstract design, on the other hand, imposes inflexibility on the flexible human body; the abundance of possible postures is reduced, and the body is disciplined in a **prosthetic manner** (cf. Michel Foucault´s theory of human dressage). Abstract design (as the inflexibility of furniture and also of the body within the fixing furniture) also contradicts the more recent orthopedic insight: ***"The next posture is the best!"*** Abstract design thus creates **inflexible quasi-prostheses** from fixed and fixing frame connections for a body that is not free to move any longer. Concrete design, on the other hand, constructs (in analogy to body mechanics) flexible **quasi-orthoses** for the free moving body, which perceives itself in the object of use as well as the "*object's autonomy"* (see Adorno quote).

C) A **unified perception of load transfer WITH use of the designed object** becomes perceptible in a sensually unrestricted and direct (= concrete) manner through the **flexible and mechanical fragmentation of the furniture** (as a ´legible´ load transfer), which can already be visually understood by its geometry: panels and lashing straps connected only at points by hinges and, moreover, in a linear and thin manner, appearing like a prototypical, ideal scheme, which is why I speak of a **schematically unified comprehensibility of load transfer with use**. Seeing (the scheme) includes both tactile-successive, and simultaneous-unified seeing.

Therefore, the following four **working hypotheses for a theory of Concrete Design** can be formulated:

(1) The design of everyday objects can be defined, in reference to **Vitruvius**, as a **Borromean knot** consisting of three (larger or smaller designed) partial areas of actioceptual-sensory experience: a) as a user you experience more or less your body load transfer into the object of use TOGETHER WITH the load transfer of the object itself **(´firmitas´)**, b) as a user you experience more or less your body's movement during use TOGETHER WITH the movement of the object itself **(´utilitas´)**, and c) more or less schematically unified comprehension **(´venustas´)** of the (actually contingent) intermediate world (of body-space and of object-use-time) TOGETHER WITH four (larger or smaller) intersections of these three experience areas. The term 'area' refers to the **possibility as potential of visual ´legibility´ and of sensory-physical experience** of a part of the design that can be assigned to a) load transfer, b) movement and c) schematically unified comprehension of load transfer and movement; the term 'four intersections of three areas' is intended to indicate the simultaneous-interdependent visual legibility and potential for physical experiences of at least two area themes 'intertwined'; in these intersection areas you ask (with regard to analysis of one design): Is the load flow within the designed object perceptible simultaneously WITH the physical use of the object, e.g., through varying perceptibility of a load flow adjustable during use (intersection of a) + b))? Is physical use of the object made predictable through its schematic visualization (intersection of b) + c))? Is the load flow within the object also made visually and schematically perceptible (intersection of a) + c))?

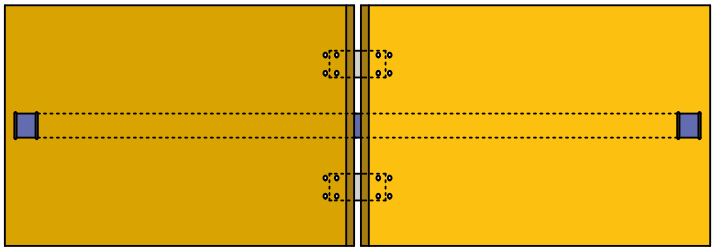
This can be achieved through dimensioning in fragmented object geometries, from which object analogies to the mechanics of the human body can be read; this is the case in my ten following furniture designs: tension-muscles in a human body > thin and textile lashing straps in the design, compression-bones in a human body > thicker wood veneer panels in the design, and joints in the human body > metal hinges in the design.

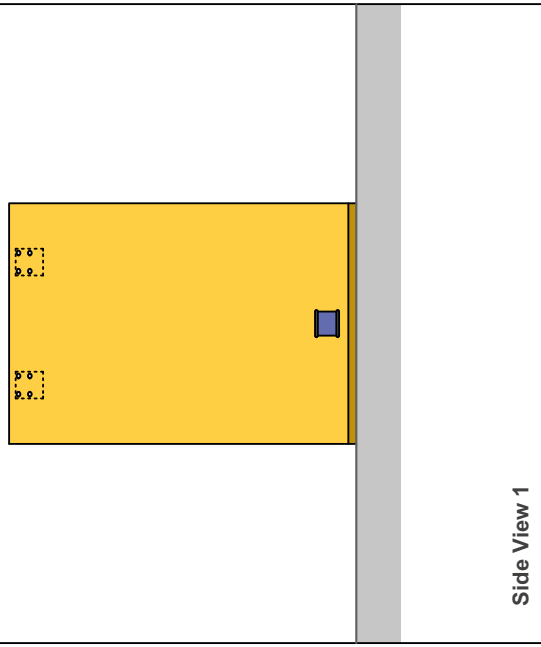
(2) The terms ´**abstract design versus Concrete Design**´ are on opposite ends of the fundamental scale of possible designing; these two terms can be used to describe fundamental tendencies in design: Concrete Design expands the three areas of experience (load transfer, movement, schematically unified comprehension) and also the four intersections of the three areas in the Borromean knot in an **interdependent interplay processually**, so that these four areas of tension and mediation (and thus the Borromean knot of design itself) become experienceable in a **de-automatizing and therefore metacognitive** way.

Abstract design, on the other hand, reduces all potential dimensions of the three experiential areas with their four intersections in the Borromean knot of design until only point contacts of three-now isolated and diminished-experience spheres remain. The potentially conceivable experience of the three domains and their interplay is reduced, thus abstracting the overall experience into isolated sub-areas: a) **imperceptible load transfer** (from the human body into the object and within the object to the ground), b) **fixation of the human body** by an unflexible furniture geometry (or abstract fixation by vulnerable technologization with regard to "convenience") and c) **attention-grabbing "look"** (e.g. a representational and therefore iconically abstract sofa in form of lips or of a hand to achieve attention amidst our mass-media attention economy, see the term “lookism” by Marcel Duchamp) instead of a schematically unified comprehension of concrete design geometry to understand load transfer and use (**which implicates sensory AND intellectual clarifying within Concrete Design**). Sensory, intellectual, and therefore processual experience in space (of load transfer, of use, and of legible schema of design) in Concrete Design stands in contrast to abstract design (with disposable products of diminishing attention and automation).
(3) **Abstract design** thus reduces the potential of conceivable experience with everyday objects (the potential of an interplay of cognitions in the ‘integrating medium human body’ without hierarchy into subject and object as well as figure and ground); abstract design **subtracts** from the possible maximum potential of the three experiences (load transfer, use, and comprehension) and it **subtracts** from the possible maximum potential of overlapping of these three experience areas (see Latin word ‘abstrahere’ for English ‘subtract’): (a) **Abstract reduction of the potentiality in the mechanical aspects of the object**: mechanics become immobile statics (e.g., abstract-fixed frame connections that are neither statically discernible nor perceptible, instead of mechanically concrete, dissected, and perceptibly flexible joint connections with tension and compression elements that yield to the human body weight), (b) **Abstract reduction of the potentiality of the user's body movement**: the freedom of the user´s movement is restricted to precisely predetermined movements, (c) **Abstract reduction of the potentiality of aesthetically ambiguous experience of body-object-contingency**: in abstract design the four (per se ambiguous) overlapping zones of the three reduced experiential areas (in the Borromean knot described above) are limited to point contact; predetermined and isolated, only partially perceptible partial functions are the result: abstractly rapid perception of the attention-grabbing "look" alongside abstractly pre-programmed utility in "convenience" alongside abstractly concealed load transfer in a "monoform"- these examples stand for abstract design. This abstract (point-like) reduction instead of concrete (space-like) world formation is particularly pronounced in motorization (as described in Adorno's text above) and in the concealment of statics (as organization of load transfer). Abstract design isolates the three areas of the Borromean knot by treating ´venustas´ as decoration or advertising, rendering ´firmitas´ unreadable, and enabling ´utilitas´ only in a static image instead of a process. The ***"look"*** (achieved through fashion-dependent decoration), the ***"convenience"*** through automation, and the **inflexible *"monoform"*** (of plastic-cast furniture for example) are aspects of **abstract furniture pieces as sculptural prostheses** which results in enormous **waste production**, as individual parts cannot be exchanged or recycled; however, exchange of parts is possible with the modularization in the ten pieces of Concrete Design shown at the end of this catalogue.
(4) In contrast, **Concrete Design**, in the sense of the above Adorno quote, enables **sensory freedom in dealing with the designed object** as well as the ***“object's autonomy”*** (as its 'responsive' yielding to body weight, ranging from 'flexibility' to 'resistance'), which can be read and experienced as a **form of interplay between mechanics, use, perception, and also manufacturing**: The **do-it-yourself** construction possibility, or the **dismantling** and **partial interchangeability** of the furniture designs presented here, adds a fourth sub-area to the Borromean knot-the now legible and experienceable **form of manufacturing play**, which extends the design-use process in a de-automatizing way to the time before and after the use of the object.
In my opinion, this concrete design is achieved in my following ten furniture examples through mechanical modularization into hinges, pressure plates, and tension straps. Such mechanical modularization, with its reusability of modules, takes into account the aspect of legibility and experience of the body-object mechanics, as well as the **ecological aspect**. I believe that in my following ten examples of Concrete Design a ***´surplus in freedom of behavior or in the object's autonomy as a lasting core of experience´*** is preserved (see Adorno's quote above):
A) **firmitas**: the ten concretist furniture objects, which yield to the body's weight yet are self-willed, make **load transfer as an interplay of loading and unloading process** both visually and tactilely-felt maximally perceptible (in a kind of orthosis instead of a prosthesis in abstract design);
B) **utilitas**: my realized ten furniture designs are based on the human body (with bones, muscles, and joints), with a view to maximum angular and vertical flexibility of both body and object, thus achieving **maximum freedom of movement** in relation to the object of use;
C) **venustas**: thanks to the highly resilient and elastic Multiplex-wood panels, large visible steel hinges, and textile tension straps, the ten furniture objects are visually differentiated to the maximum extent, yet remain subtly linear, sign-like, and schematic, as well as **self-explanatory**, so that both load transfer/ firmitas and use/ utilitas are made maximally perceptible, both visually and through varying processes of use.

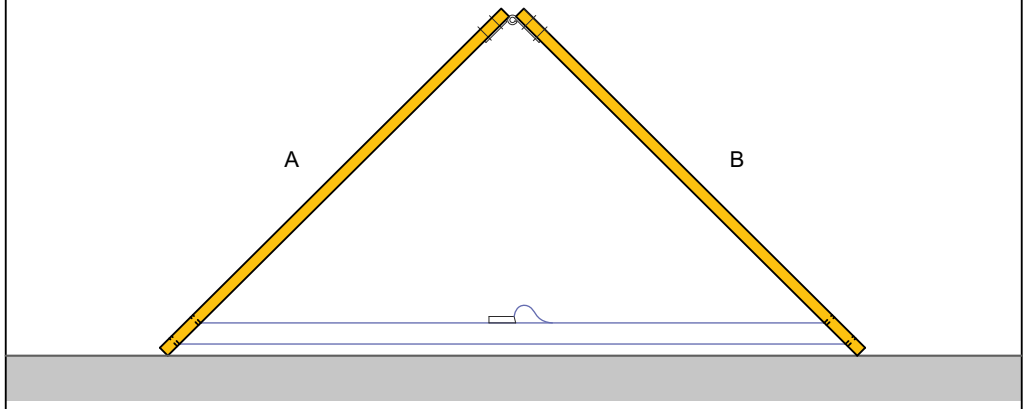
Concrete Design: Basic Module of the A-Flex Furniture System

Top View





Side View 2



A-Flex Furniture System: Basic Module
Scale: 1:10 (Printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

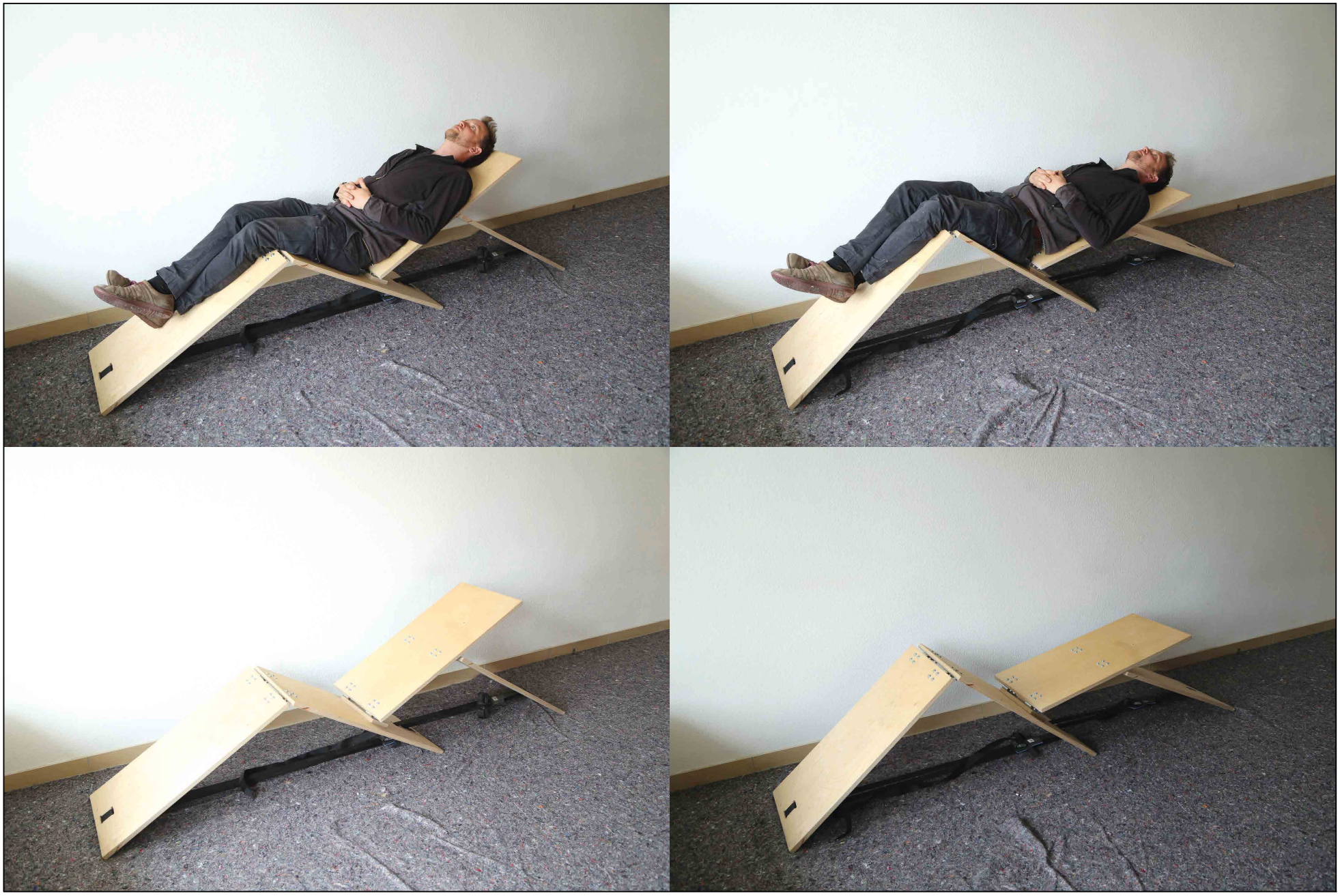
A Multiplex panel with 2 pre-drilled slots for lashing strap
B Multiplex panel with 2 pre-drilled slots for lashing strap

2 hinges 13 x 5 x 0.4 cm, each with eight holes for 6 mm threaded screws, pin approx. 8 mm

Lashing strap X cm x Y cm

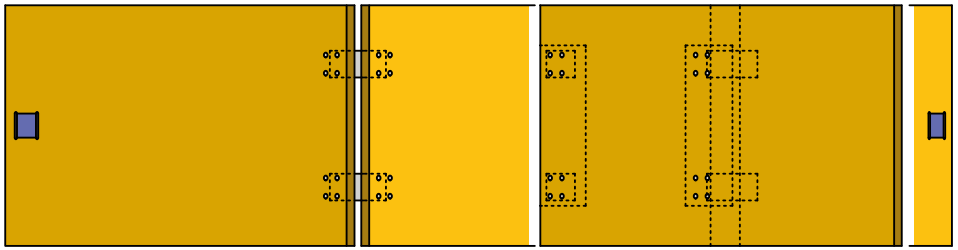
Concrete Design: A-Flex Furniture System: A-Flex No. 1 / **Lounger**

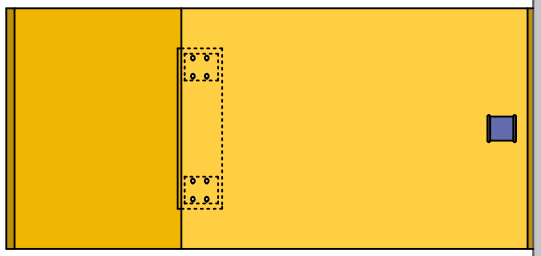
Concrete Design: A-Flex Furniture System: A-Flex No. 1 / **Lounger**



Concrete Design: A-Flex Furniture System: A-Flex No. 1 / Lounger

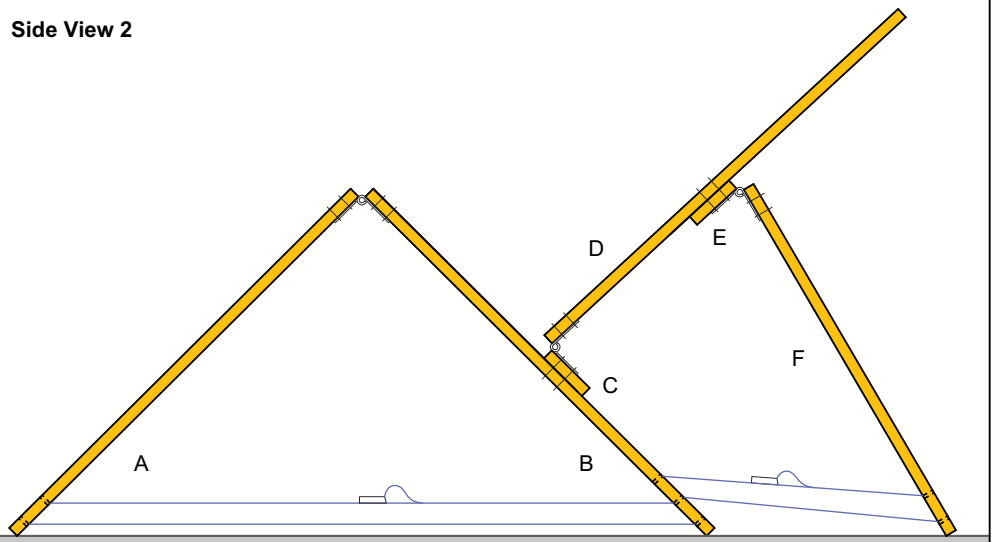
Top View





Side View 1

Side View 2



A-Flex Furniture System: A-Flex No. 1 / Lounger
Number of A-Flex Modules: Two
Scale: 1:10 (Printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

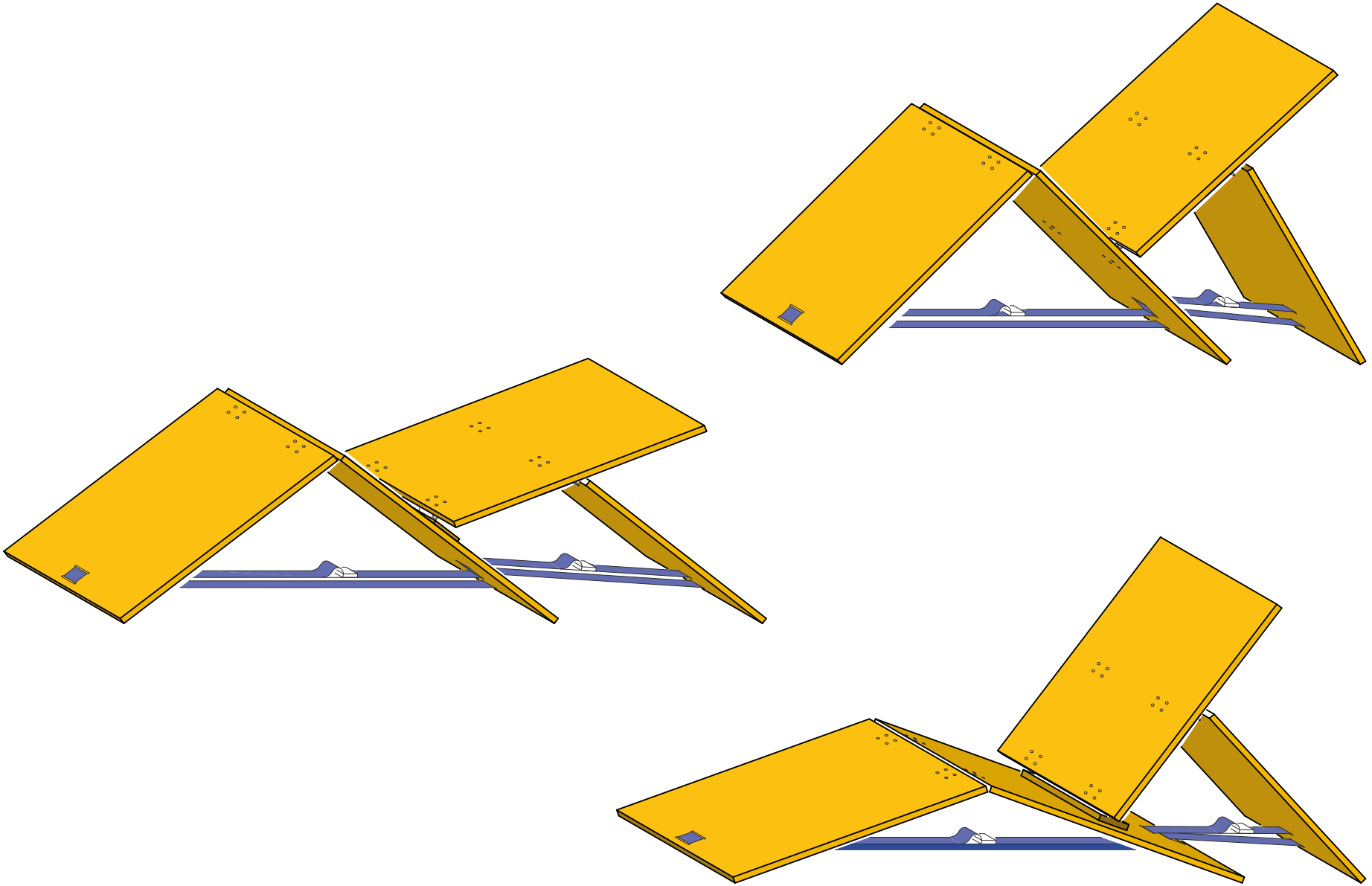
A Multiplex panel 90 x 45 x 2.1 cm with 2 pre-drilled slots for lashing straps
B Multiplex panel 90 x 45 x 2.1 cm with 3 pre-drilled slots for two lashing straps
C Multiplex panel 30 x 10 x 2.1 cm
D Multiplex panel 90 x 45 x 2.1 cm
E Multiplex panel 30 x 10 x 2.1 cm
F Multiplex panel 90 x 45 x 2.1 cm with 2 pre-drilled slots for lashing strap

6 hinges, 13 x 5 x 0.4 cm, with eight holes for 6 mm screws, pin approx. 8 mm

2 lashing straps, 4.5 x 250 cm

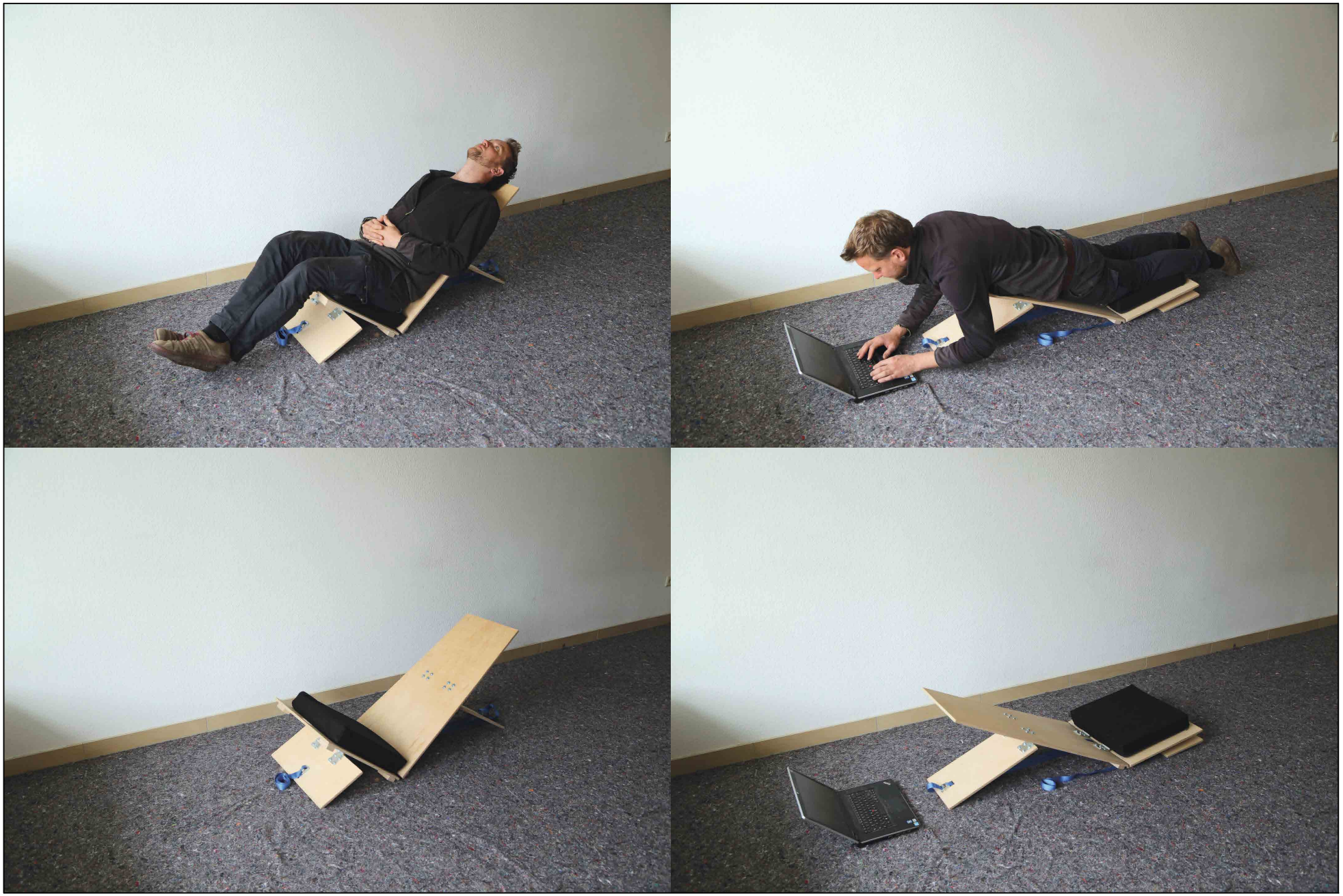
Concrete Design: A-Flex furniture system: A-Flex No. 1 / **Lounger**

Parallel projections - examples of possible angles (angles are infinitely adjustable)



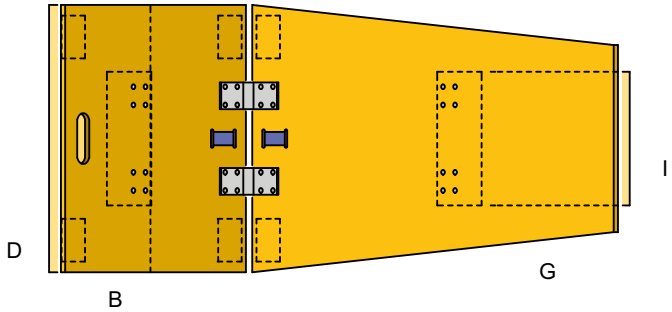
Concrete Design: A-Flex Furniture System: A-Flex No. 2 / Floor Chair

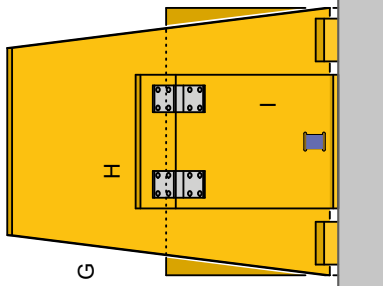
Concrete Design: A-Flex Furniture System: A-Flex No. 2 / Floor Chair



Concrete Design: A-Flex Furniture System: A-Flex No. 2 / Floor Chair

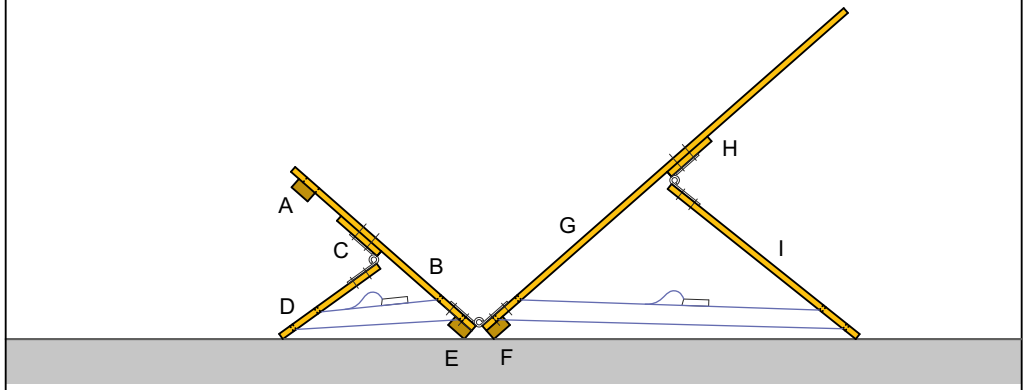
Top View

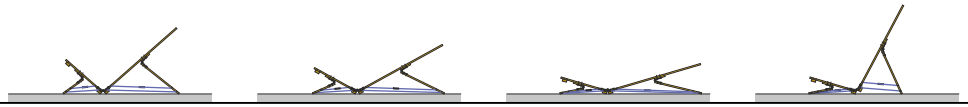




Side View 1

Side View 2





A-Flex Furniture System: A-Flex No. 2 / Floor Chair
Number of A-Flex modules: two
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

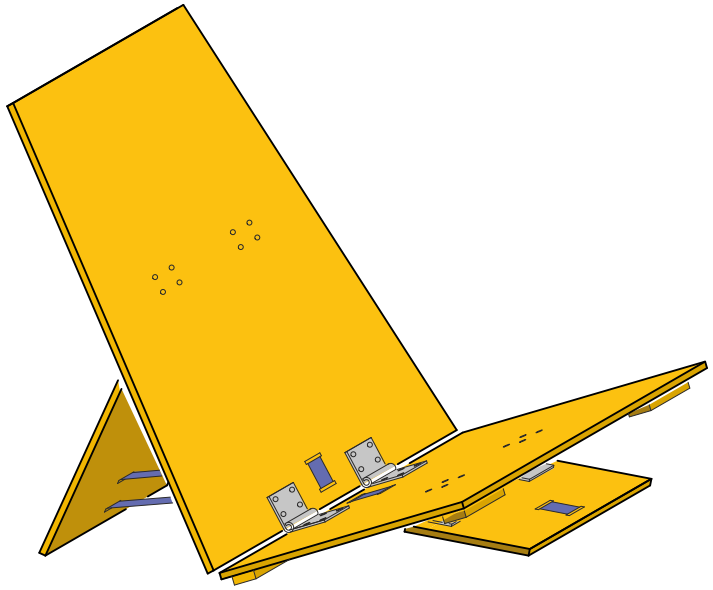
A, E, F Multiplex panel 4 x 8 x 2.1 cm, glued and screwed on
B Multiplex panel 45 x 50 x 1.2 cm with 2 pre-drilled slots for lashing straps and a hole for a hand to carry (3 cm x 9.5 cm)
C Multiplex panel 10 x 25 x 1.8 cm
D Multiplex panel 23 x 50 x 1.2 cm with 2 pre-drilled slots for lashing straps
G Multiplex panel 90 x 50 (bottom of the panel) and 35 (top of the panel) x 1.2 cm with 2 pre-drilled slots for lashing straps, tapered for prone positioning with arm clearance
H Multiplex panel 10 x 25 x 1.8 cm
I Multiplex panel 45 x 25 x 1.2 cm with 2 pre-drilled slots for lashing straps

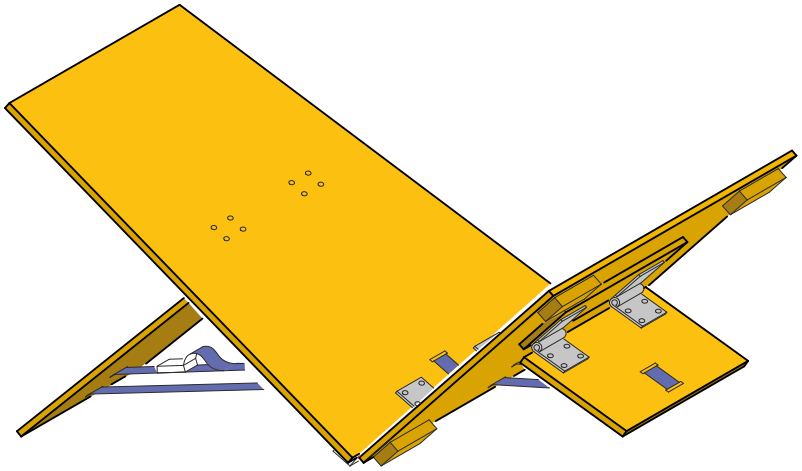

6 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

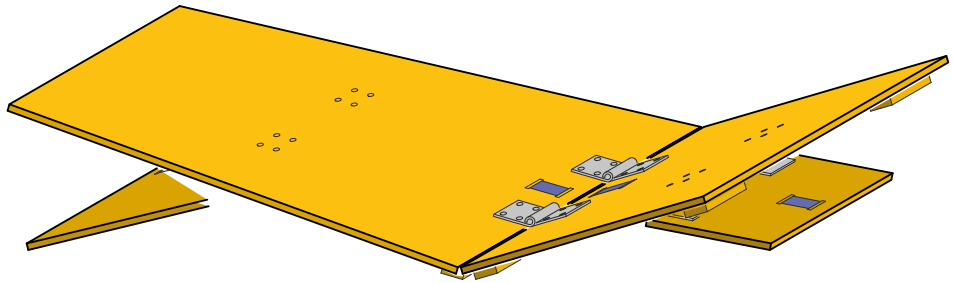

2 lashing straps 2.5 x 250 cm

Concrete Design: A-Flex furniture system: A-Flex No. 2 / Floor Chair

Parallel projections - examples of possible angles (angles are infinitely adjustable, the object can also be used while lying on your stomach)

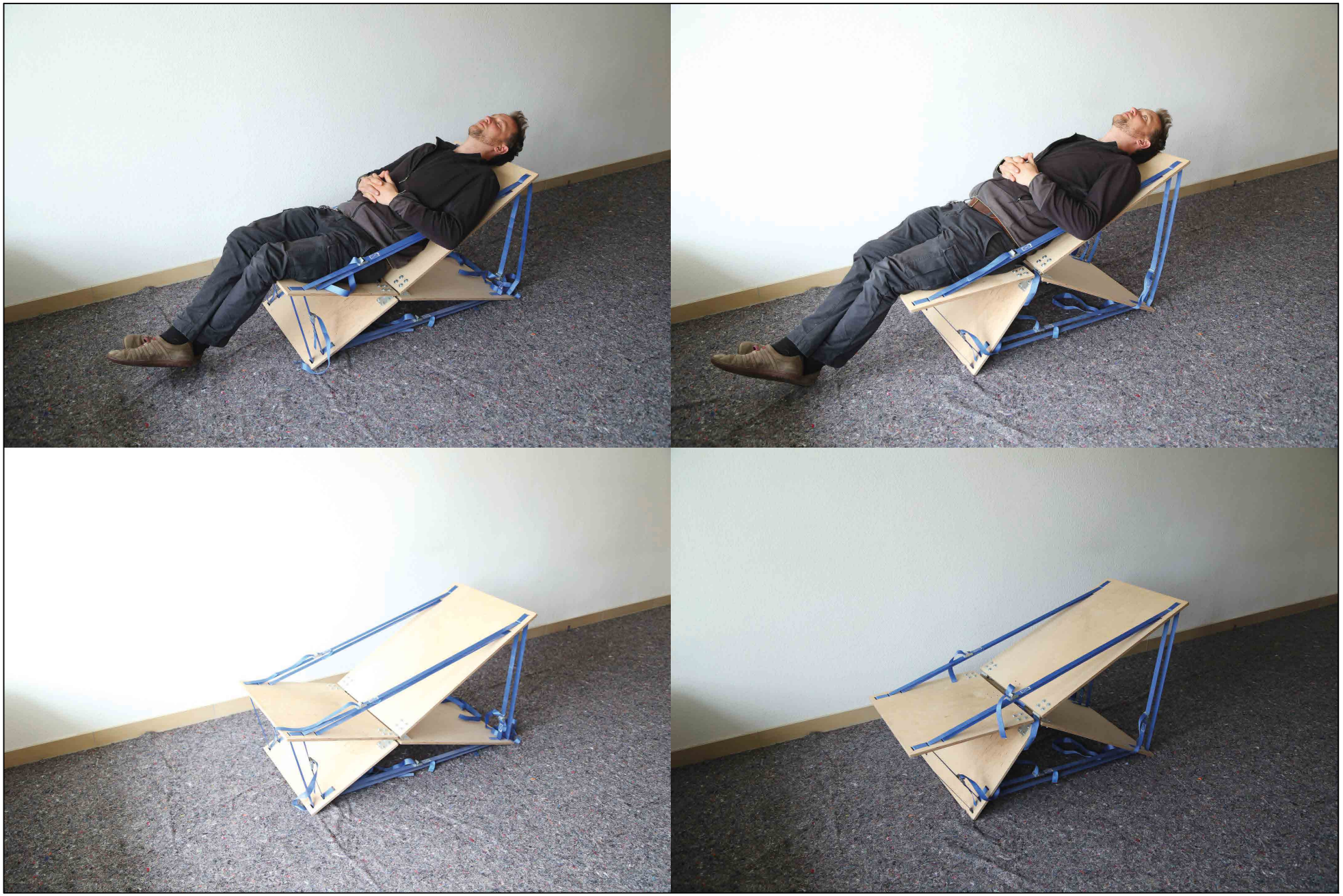






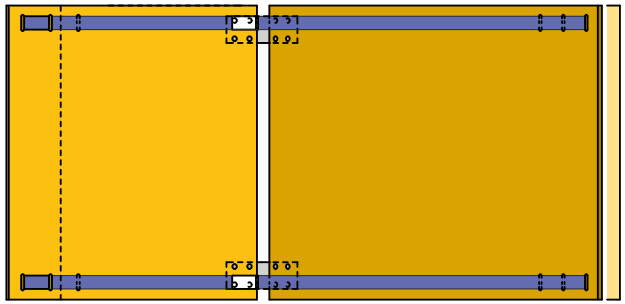
Concrete Design: A-Flex Furniture System: A-Flex No. 3 / Easy Chair, Adjustable Chair

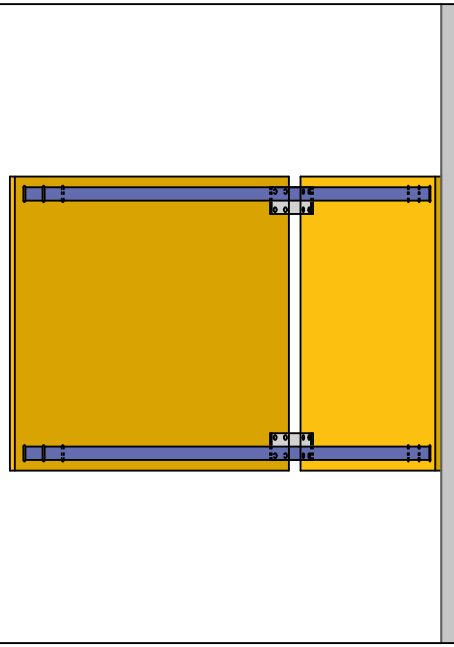
Concrete Design: A-Flex Furniture System: A-Flex No. 3 / Easy Chair, Adjustable Chair



Concrete Design: A-Flex Furniture System: A-Flex No. 3 / Easy Chair, Adjustable Chair

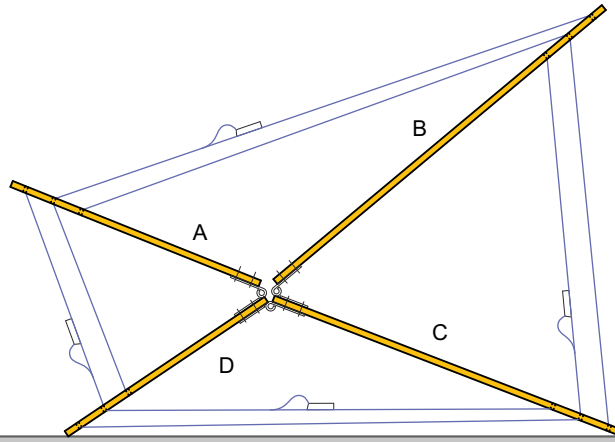
Top View

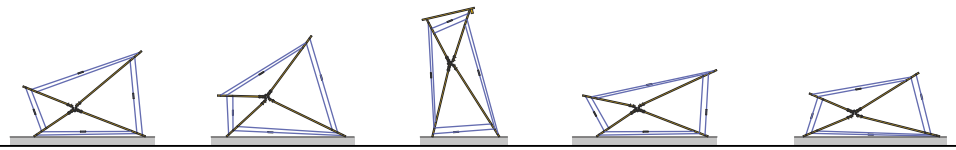




Side View 1

Side View 2





A-Flex Furniture System: A-Flex No. 3 / Armchair and Recliner
Number of A-Flex modules: four
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

A Multiplex panel 50 x 55 x 1.2 cm with 6 pre-drilled slots for 4 lashing straps
B Multiplex panel 80 x 55 x 1.2 cm with 6 pre-drilled slots for 4 lashing straps
C Multiplex panel 70 x 55 x 1.2 cm with 6 pre-drilled slots for 4 lashing straps
D Multiplex panel 45 x 55 x 1.2 cm with 6 pre-drilled slots for 4 lashing straps

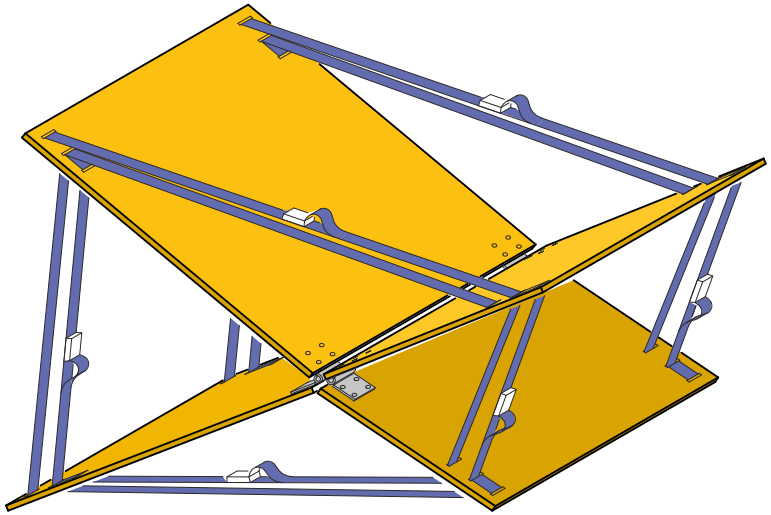
6 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

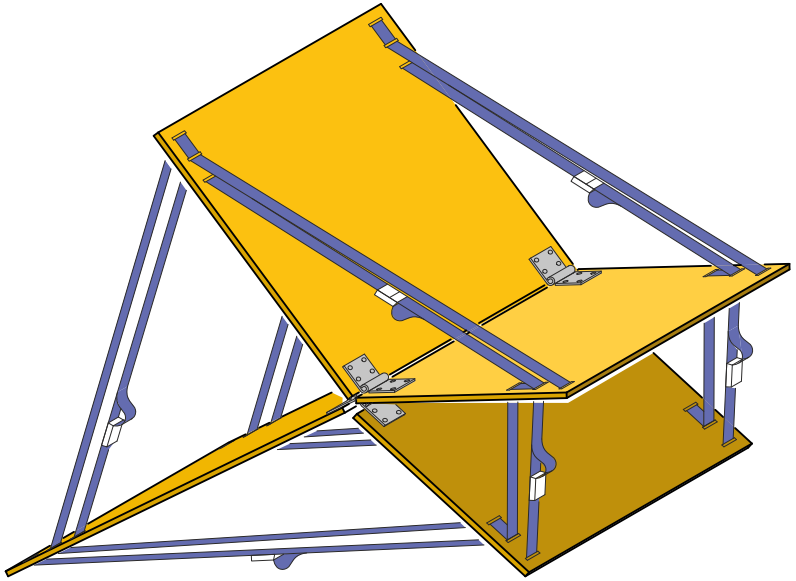
8 lashing straps 2.5 x 250 cm

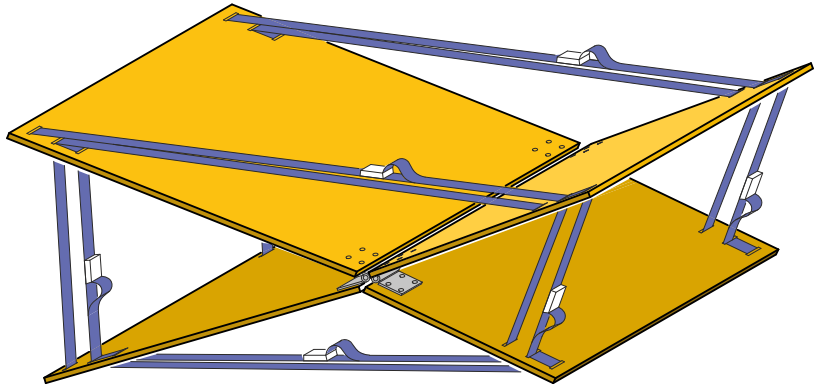
Edge distance from the center of the hole at points A and B reduced by one centimeter to allow for movement of the plates

Concrete Design: A-Flex furniture system: A-Flex No. 3 / Easy Chair, Adjustable Chair

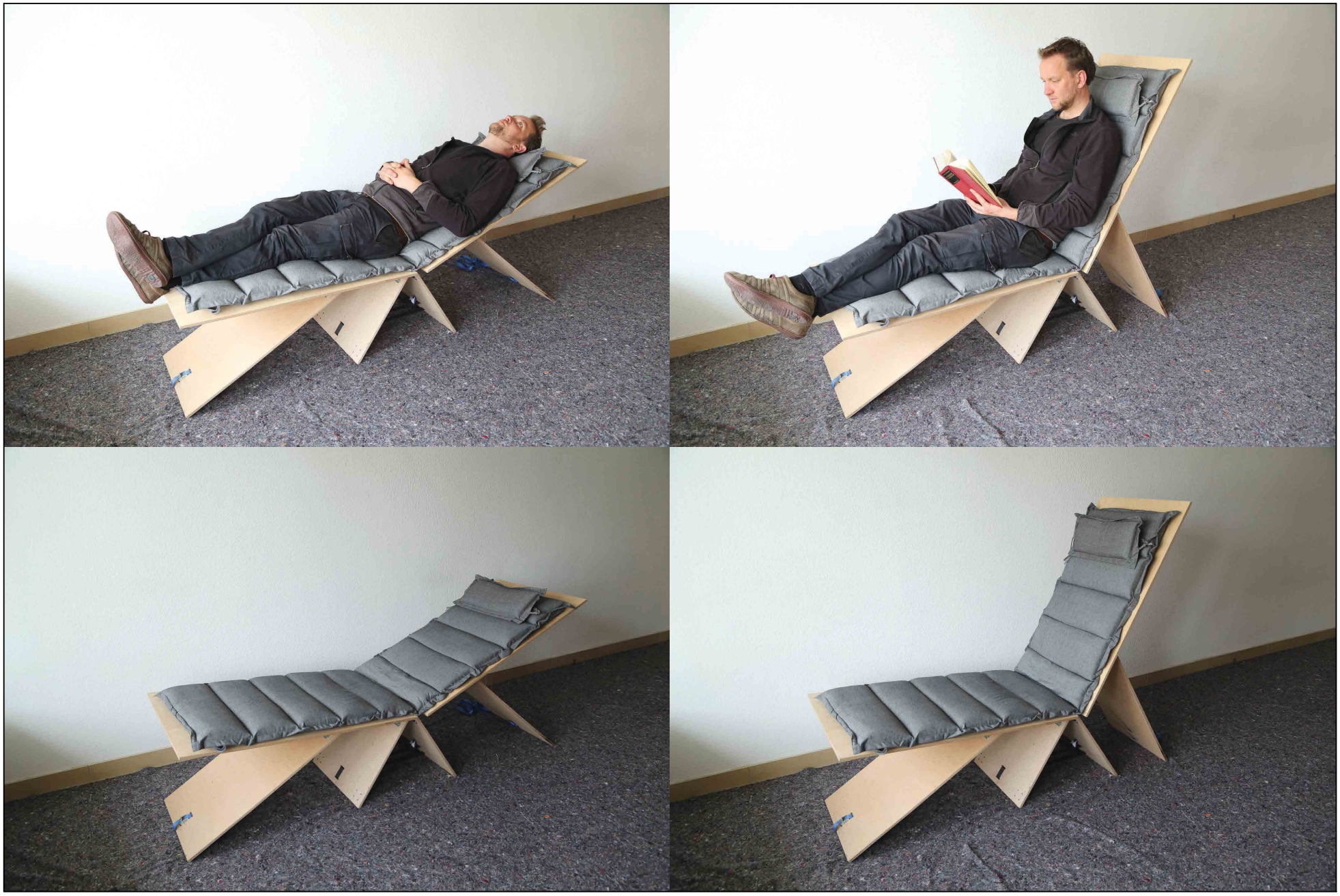
Parallel projections - examples of possible angles (angles are infinitely adjustable, the object can also be used rotated by 180°)







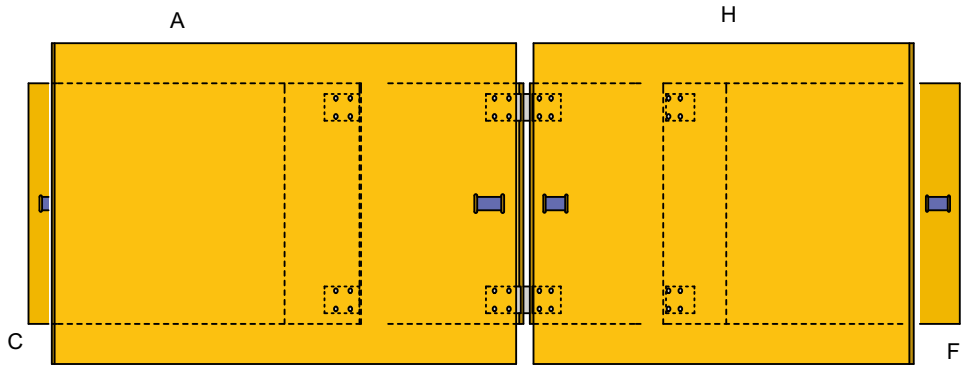
Concrete Design: A-Flex Furniture System: A-Flex No. 4 / Lounger

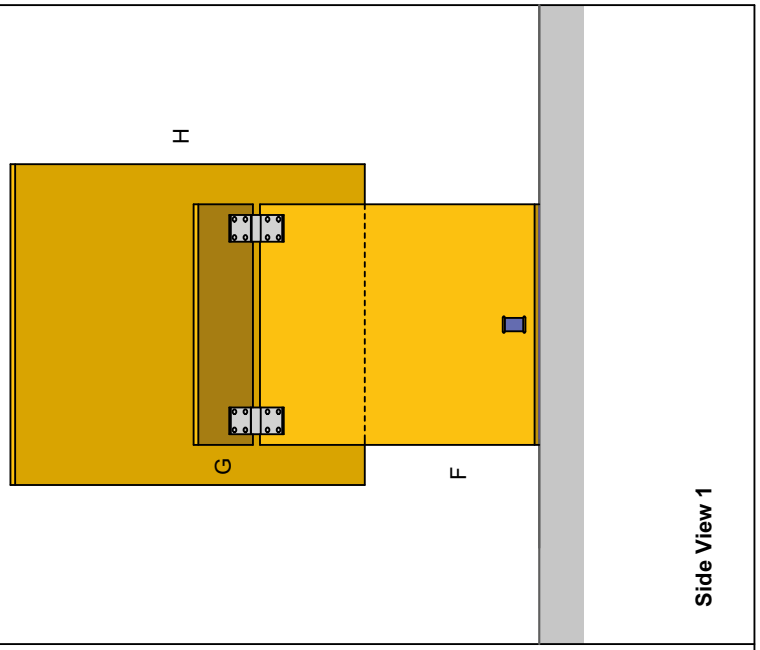


Concrete Design: A-Flex Furniture System: A-Flex No. 4 / Lounger

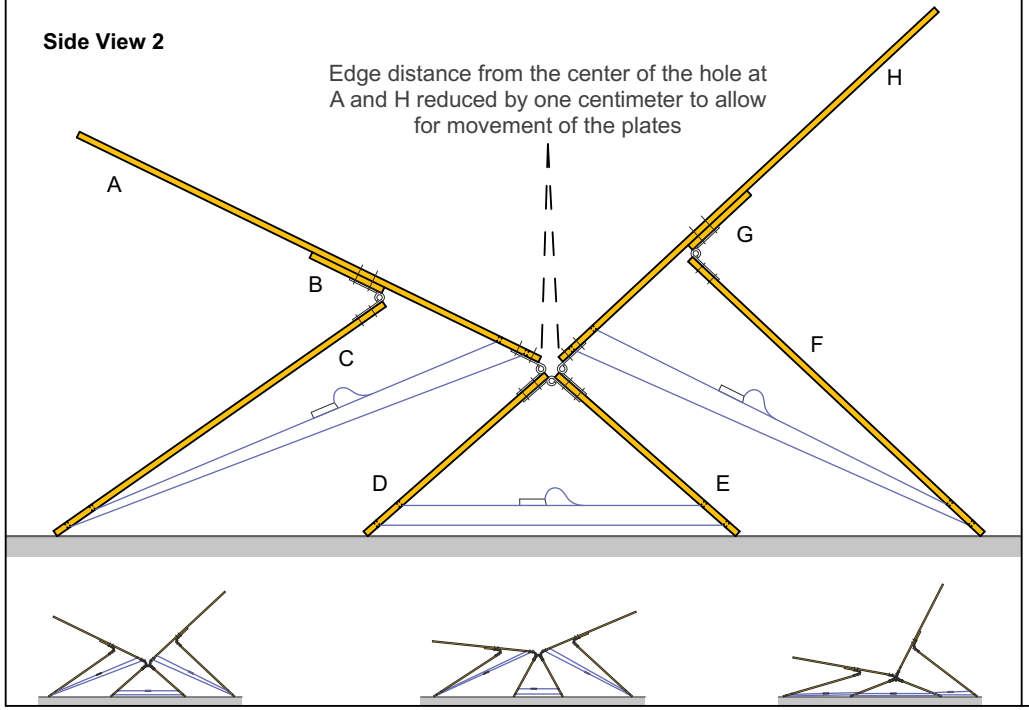
Concrete Design: A-Flex Furniture System: A-Flex No. 4 / Lounger

Top View





Side View 2



A-Flex Furniture System: A-Flex No. 4 / Lounger
Number of A-Flex modules: three
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

A, H Multiplex panel 96 x 60 x 1.2 cm with 2 pre-drilled slots for lashing straps
B, G Multiplex panel 15 x 45 x 1.2 cm
C, F Multiplex panel 75 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps
D, E Multiplex panel 45 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps; optionally, panels D and E can be connected with a third panel of the same size and four hinges to form a stable triangular stand

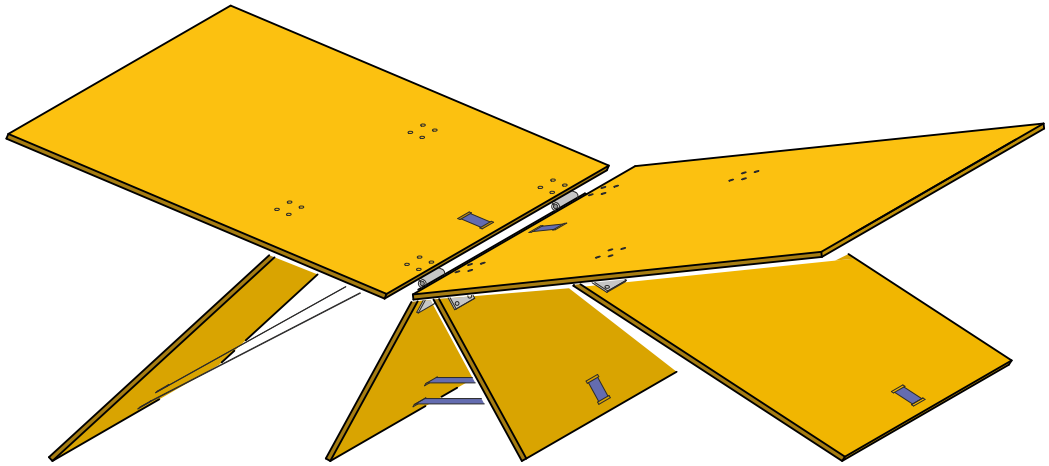

10 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

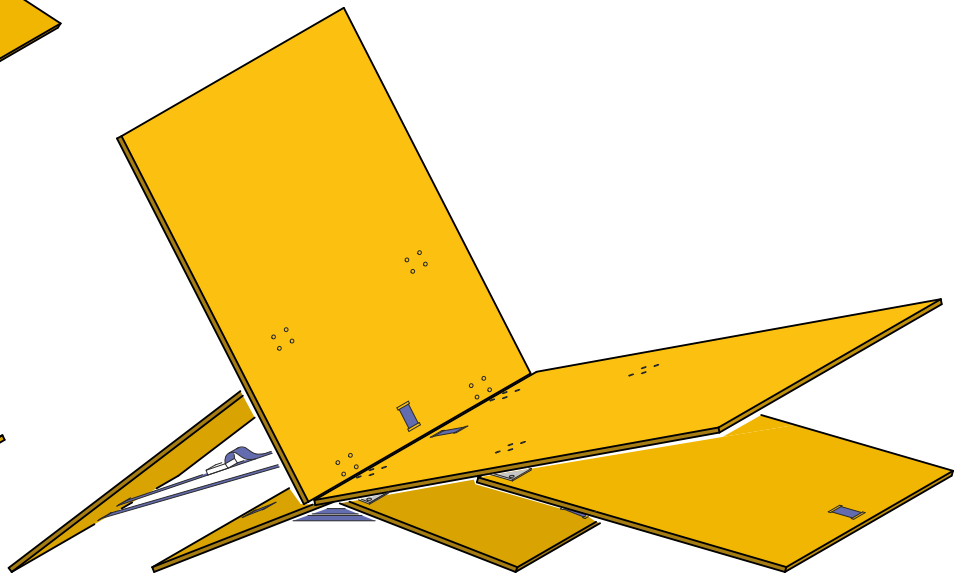

3 lashing straps 2.5 x 250 cm

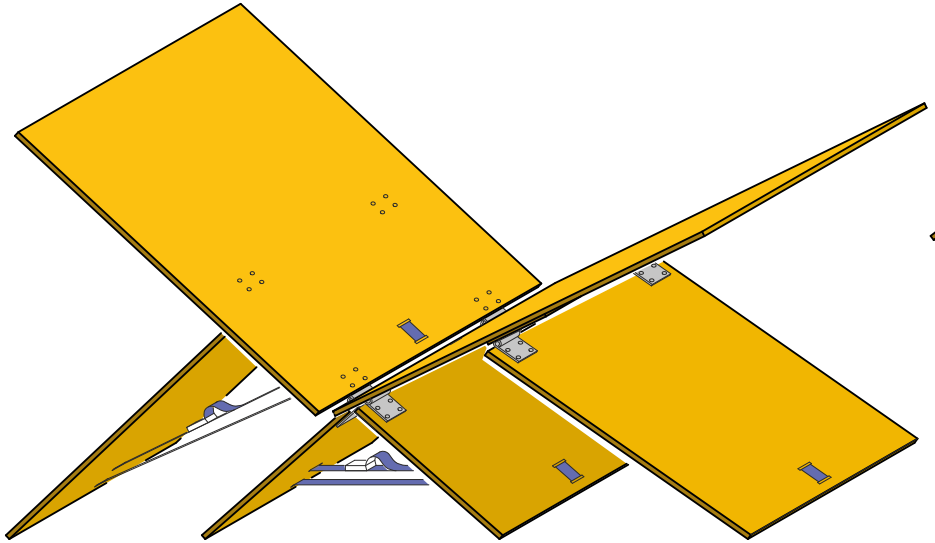
Edge distance from the center of the hole at A and H reduced by one centimeter to allow for movement of the plates

Concrete Design: A-Flex furniture system: A-Flex No. 4 / Lounger

Parallel projections - examples of possible angles (angles are infinitely adjustable)

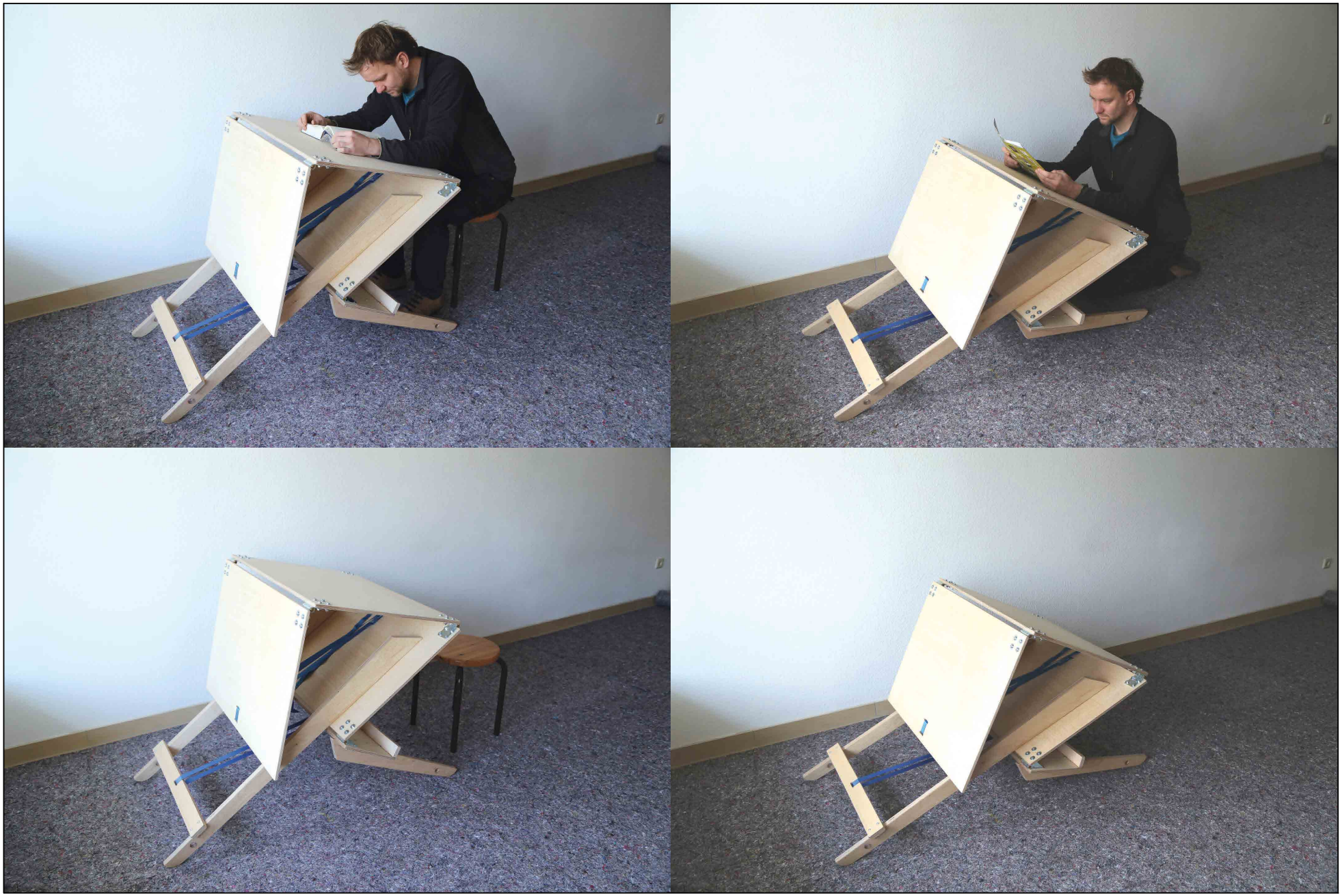






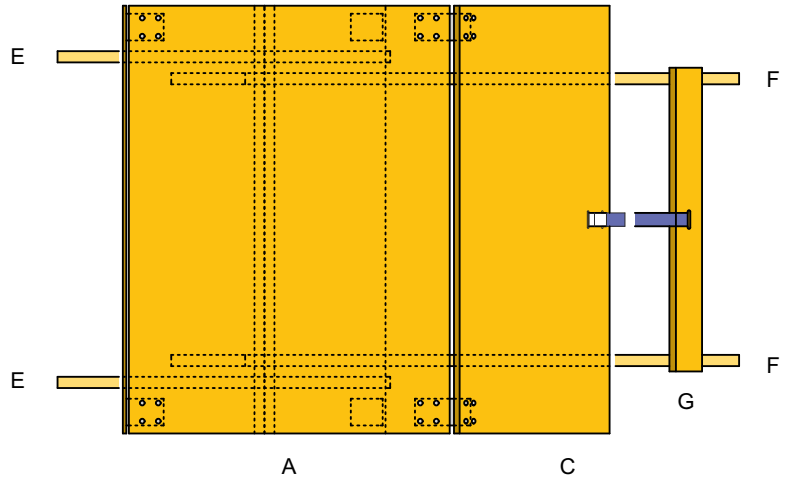
Concrete Design: A-Flex Furniture System: A-Flex No. 5 / Folding Table

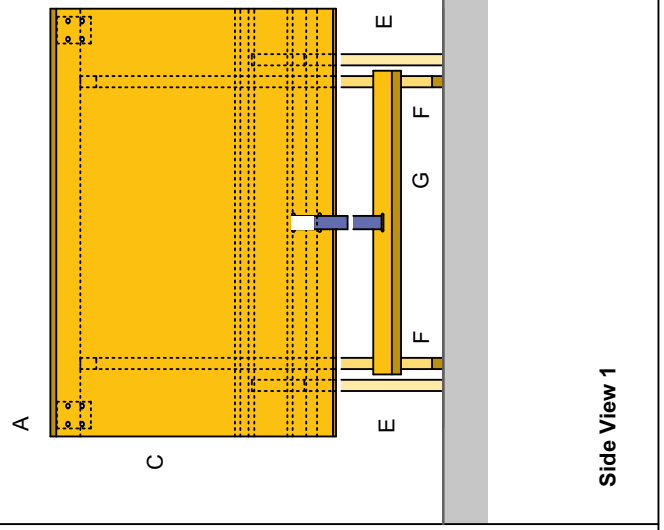
Concrete Design: A-Flex Furniture System: A-Flex No. 5 / Folding Table



Concrete Design: A-Flex Furniture System: A-Flex No. 5 / Folding Table

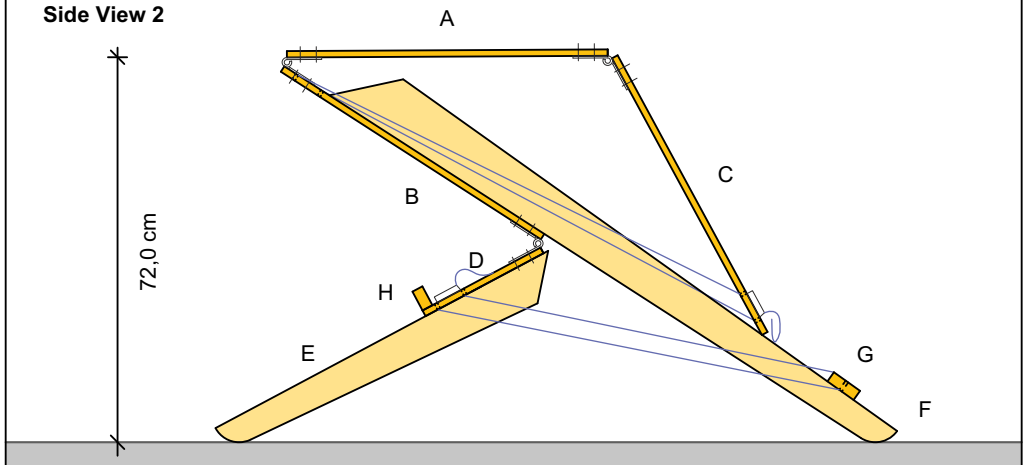
Top View

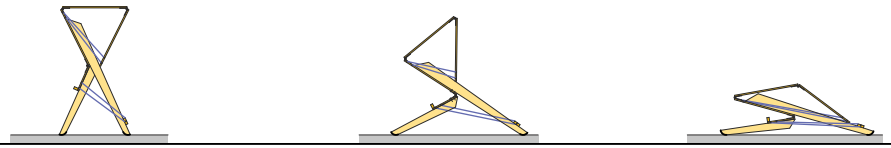




Side View 1

Side View 2





A-Flex Furniture System: A-Flex No. 5 / Folding Table
Number of A-Flex modules: two
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017 - 2022)

Symbol Legend:

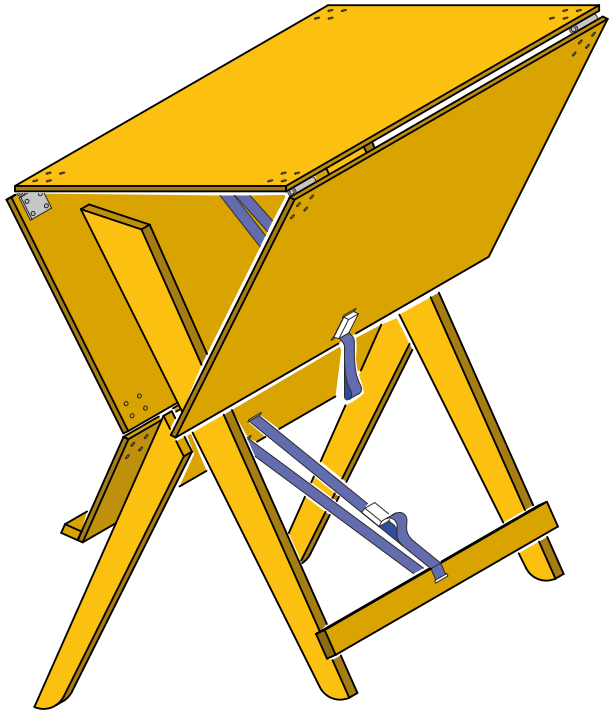
A 1x Multiplex panel 60 x 80 x 1.2 cm
B 1x Multiplex panel 57.9 x 80 x 1.2 cm
C 1x Multiplex panel 58.9 x 80 x 1.2 cm
D 1x Multiplex panel 25 x 80 x 1.2 cm
E 2x Multiplex panels as legs, glued and screwed to D
F 2x Multiplex panels as legs, glued and screwed to B
G 1x Multiplex panel 6 x 56.8 x 2.1 cm, glued and screwed to F with a slot in the center for a lashing strap
H 1x Multiplex panel 4 x 80 x 2.1 cm, glued and screwed to D to stiffen panel D for the lashing strap

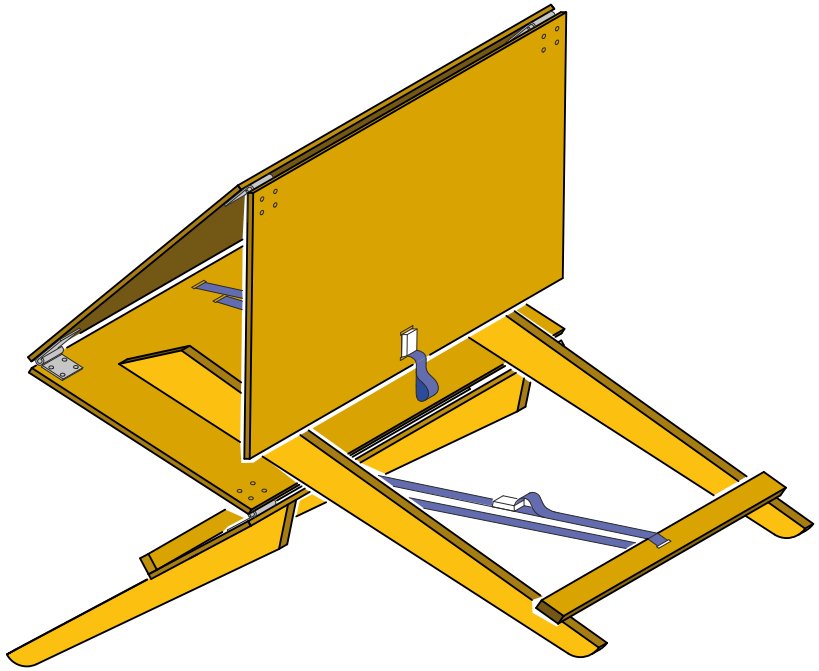

6 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

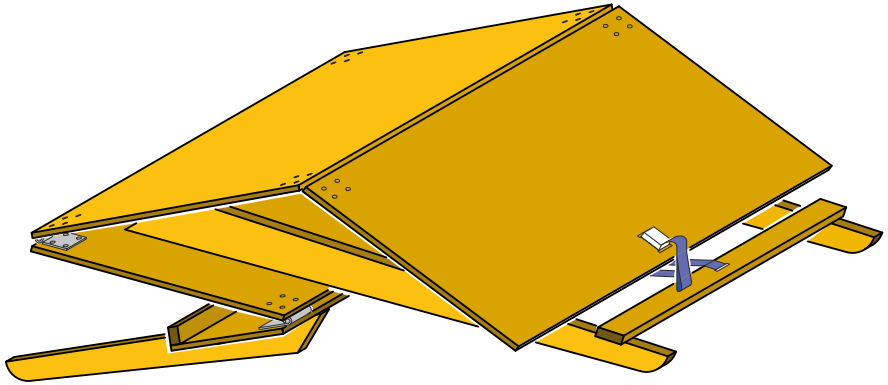

2 lashing straps (2.5 x 250 cm and 2.5 x 400 cm)

Concrete Design: A-Flex furniture system: A-Flex No. 5 / Folding Table

Parallel projections - examples of possible angles (angles are infinitely adjustable)





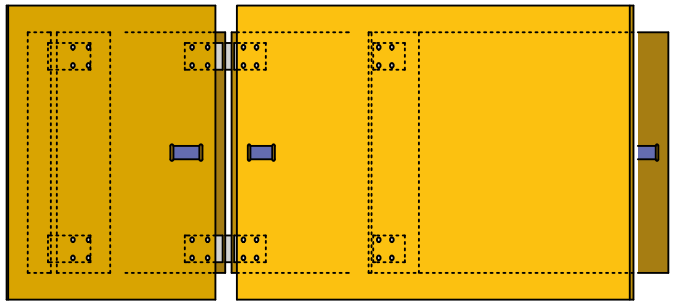


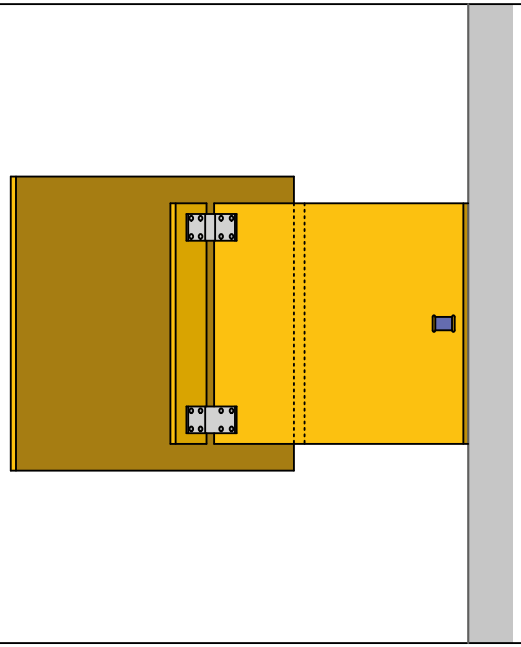
Concrete Design: A-Flex Furniture System: A-Flex No. 6 / Deckchair, Adjustable Chair

Concrete Design: A-Flex Furniture System: A-Flex No. 6 / Deckchair, Adjustable Chair

Concrete Design: A-Flex Furniture System: A-Flex No. 6 / Deckchair, Adjustable Chair

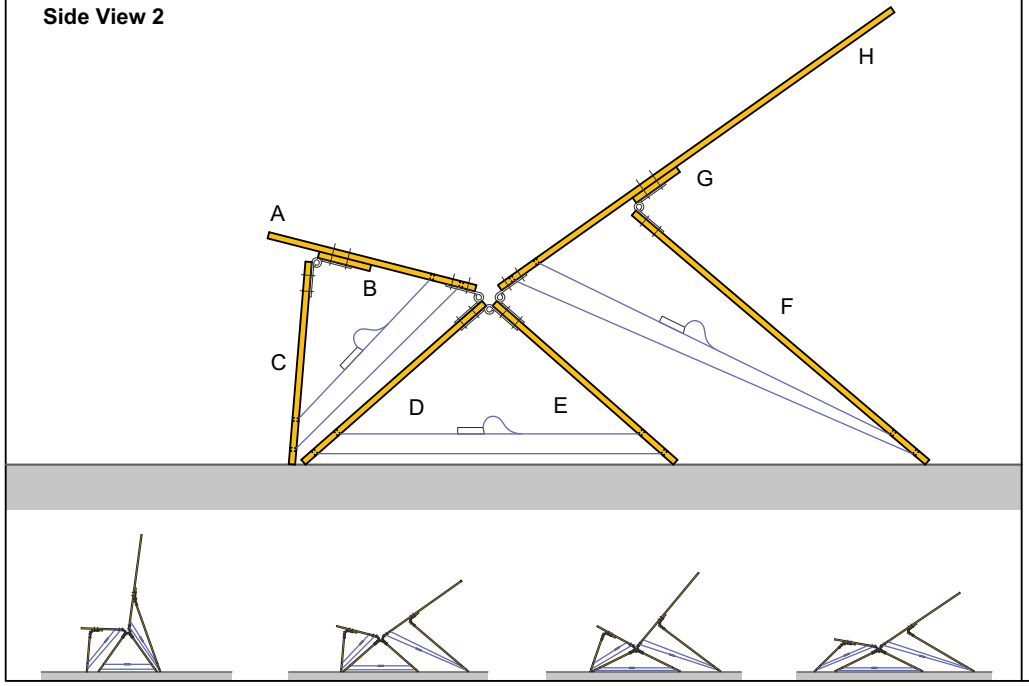
Top View





Side View 1

Side View 2



A-Flex Furniture System: A-Flex No. 6 / Deckchair, Adjustable Chair
Number of A-Flex modules: three
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017)

Symbol Legend:

A Multiplex panel 40 x 55 x 1.2 cm with 2 pre-drilled slots for lashing straps
B Multiplex panel 10 x 45 x 1.2 cm
C Multiplex panel 38 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps
D, E Multiplex panel 45 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps
F Multiplex panel 72 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps
G Multiplex panel 10 x 45 x 1.2 cm
H Multiplex board 90 x 55 x 1.2 cm with 2 pre-drilled slots for lashing straps

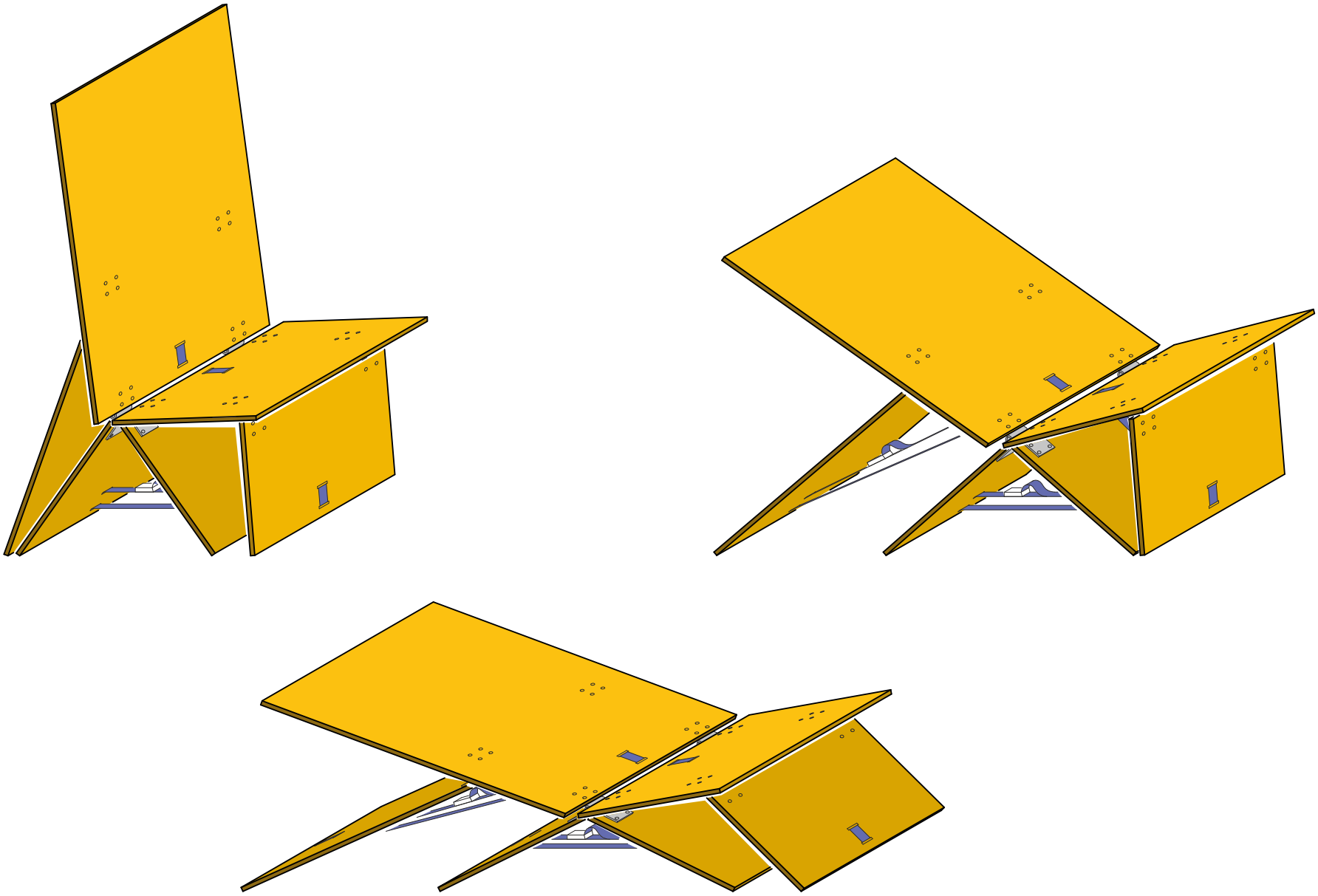
10 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

3 lashing straps 2.5 x 250 cm

The distance from the center of the pre-drilled holes at points A and H is reduced by one centimeter to allow for movement of the boards.

Concrete Design: A-Flex furniture system: A-Flex No. 6 / Deckchair, Adjustable Chair

Parallel projections - examples of possible angles (angles are infinitely adjustable)

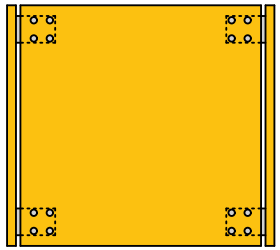


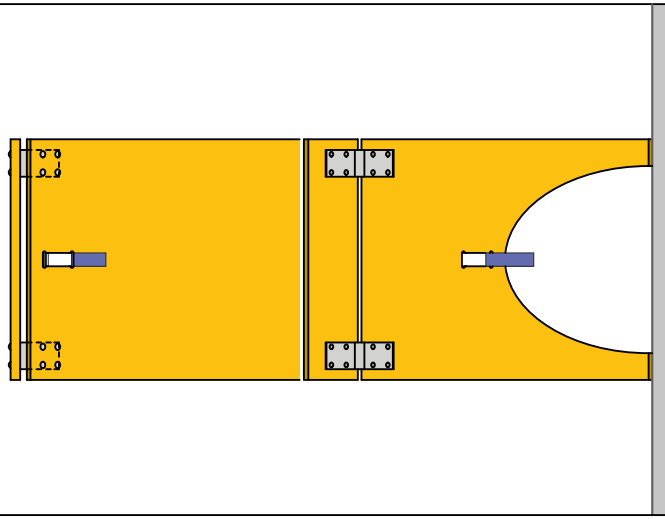
Concrete Design: A-Flex Furniture System: A-Flex No. 7 / Folding Table

Concrete Design: A-Flex Furniture System: A-Flex No. 7 / Folding Table

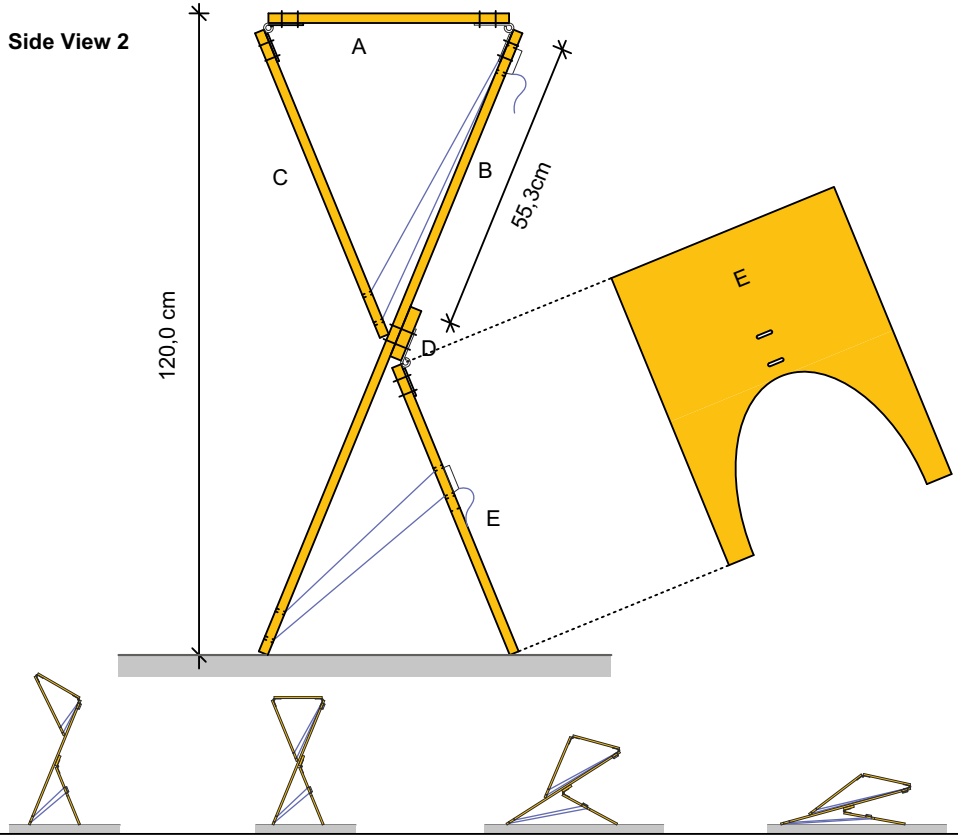
Concrete Design: A-Flex Furniture System: A-Flex No. 7 / Folding Table

Top View





Side View 2



A-Flex Furniture System: A-Flex No. 7 / Folding Table
Number of A-Flex Modules: two
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2017 - 2022)

Symbol Legend:

A Alder blockboard 45 x 45 x 1.8 cm
B Alder blockboard 125.7 x 45 x 1.8 cm (more rigid than plywood if the ribs are oriented lengthwise)
C Alder blockboard 61.6 x 45 x 1.8 cm
D Alder blockboard 10 x 45 x 2.2 cm (+ 4 mm thickness due to distance for screw heads in E)
E Alder blockboard 58.0 x 45 x 1.8 cm with a semi-oval cutout for feet

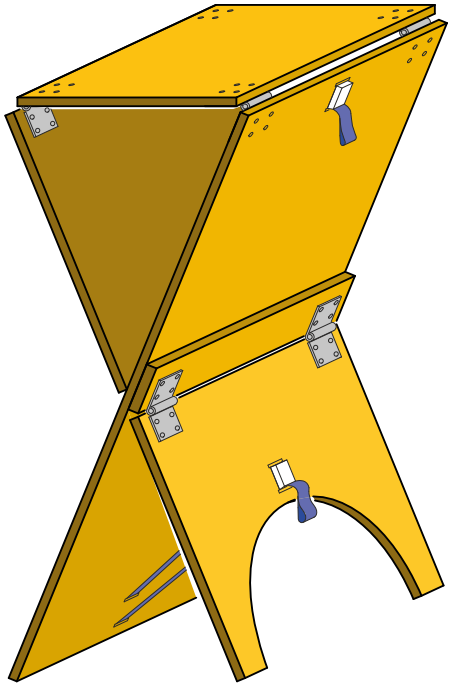
6 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

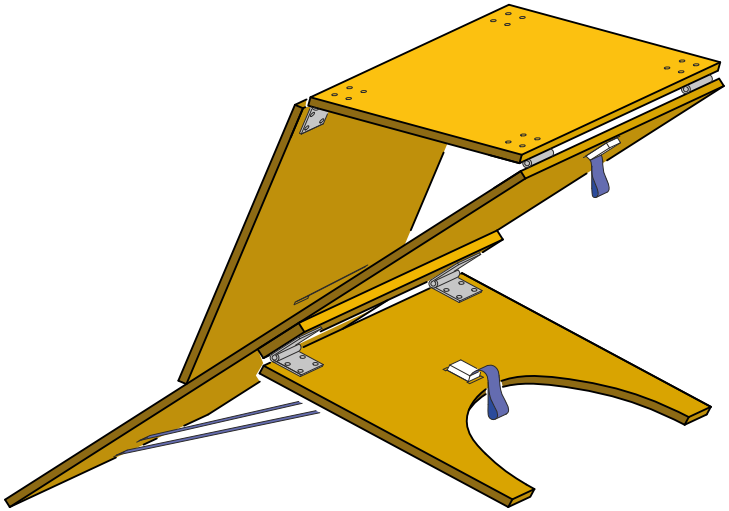
2 lashing straps 2.5 x 250 cm

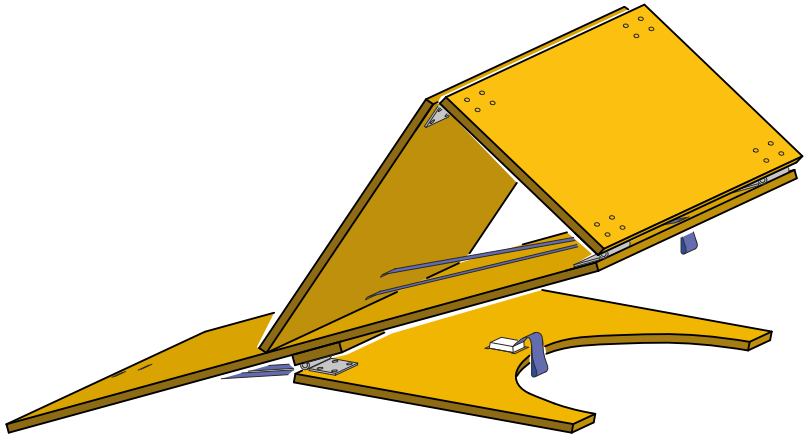
6 mm threaded screws with a flat, wide head for edge protection of plate C and use of plate A

Concrete Design: A-Flex furniture system: A-Flex No. 7 / Folding Table

Parallel projections - examples of possible angles (angles are infinitely adjustable)





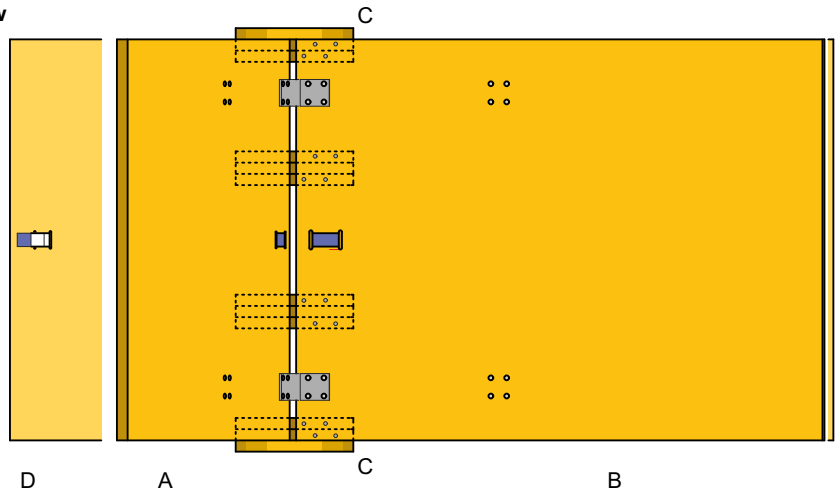


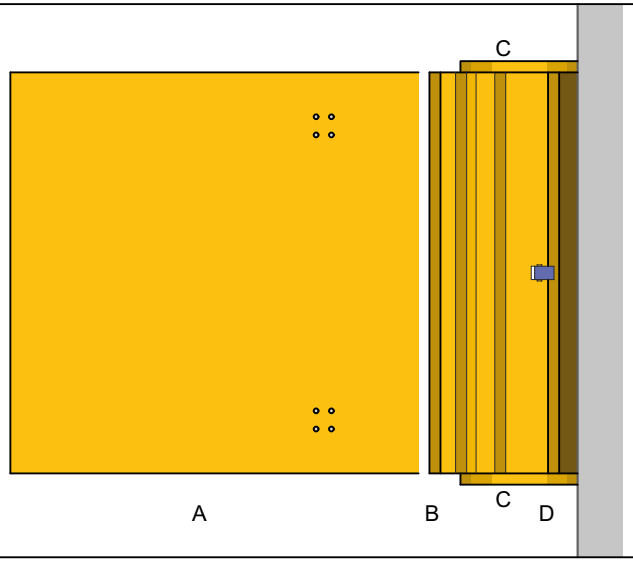
Concrete Design: A-Flex Furniture System: A-Flex No. 8 / Bed

Concrete Design: A-Flex Furniture System: A-Flex No. 8 / Bed

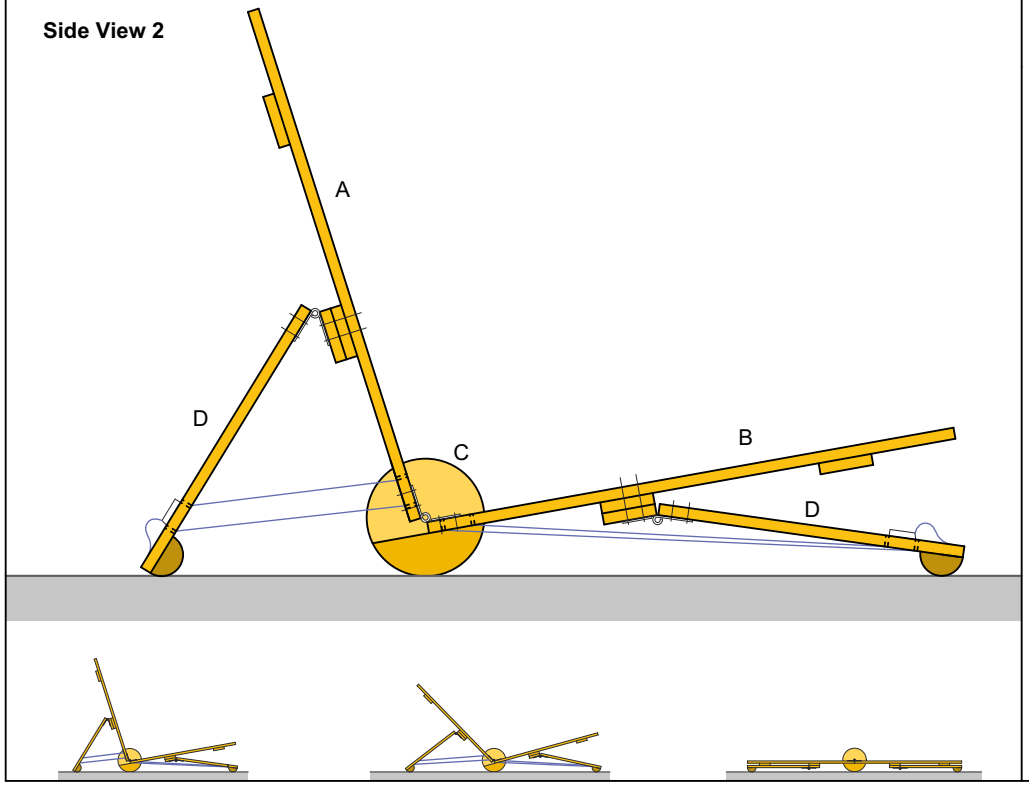
Concrete Design: A-Flex Furniture System: A-Flex No. 8 / Bed

Top View





Side View 2



A-Flex Furniture System: A-Flex No. 8 / Bed
Number of A-Flex modules: two
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2024)

Symbol Legend:

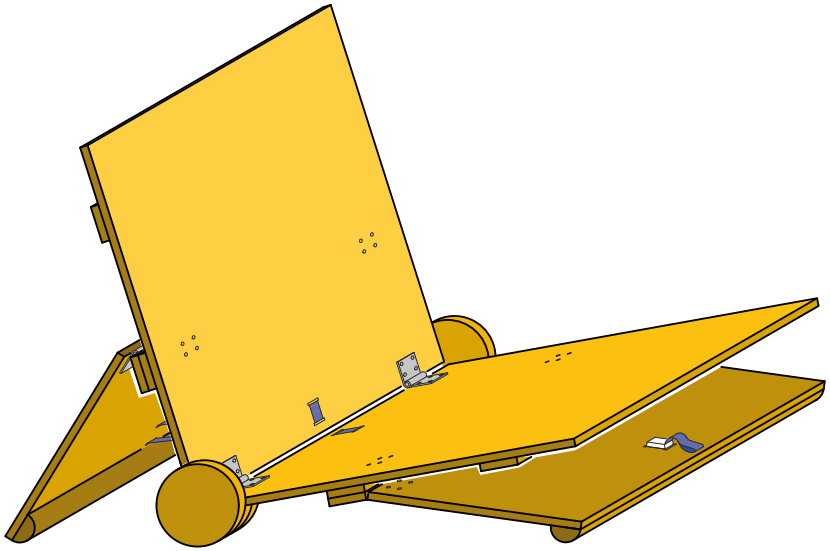
A Multiplex panel 100 x 75 x 2.1 cm with three screwed-on spacer plates 10 x 75 x 2.1 cm
B Multiplex panel 100 x 75 x 2.1 cm with three screwed-on spacer plates 10 x 75 x 2.1 cm and four circular multiplex panel supports d = 22 cm (consisting of 2 circular plates and 10 circular segment plates under A)
C Circular multiplex panel d = 22 cm with material thickness 2.1 cm, doubled up twice for supporting the two lying panels
D multiplex panel 57.5 x 75 x 2.1 cm with a screwed-on half-round timber d= 80 mm (top edge flattened for screwing on under the panel) as a support

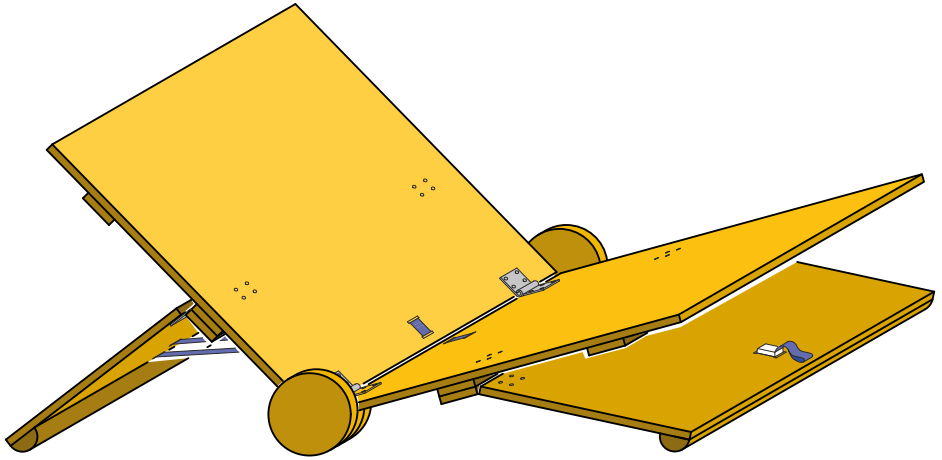
6 hinges 13 x 5 x 0.4 cm with eight holes for 6 mm threaded screws, pin approx. 8 mm

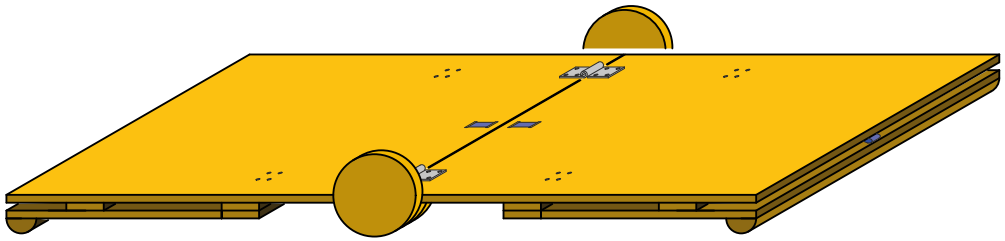
2 lashing straps 2.5 cm x 250 cm, running through slots in the multiplex panels A, B and 2x D

Concrete Design: A-Flex furniture system: A-Flex No. 8 / Bed

Parallel projections - examples of possible angles (angles are infinitely adjustable)





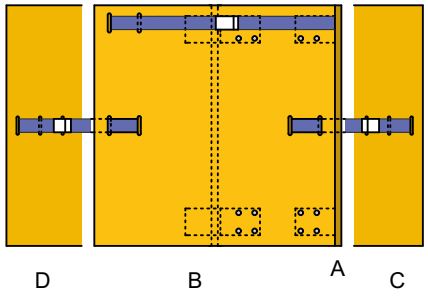


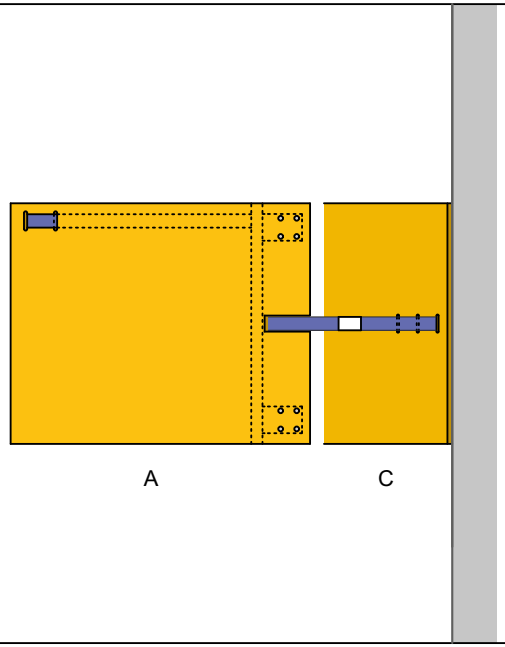
Concrete Design: A-Flex Furniture System: A-Flex No. 9 / Adjustable Chair

Concrete Design: A-Flex Furniture System: A-Flex No. 9 / Adjustable Chair

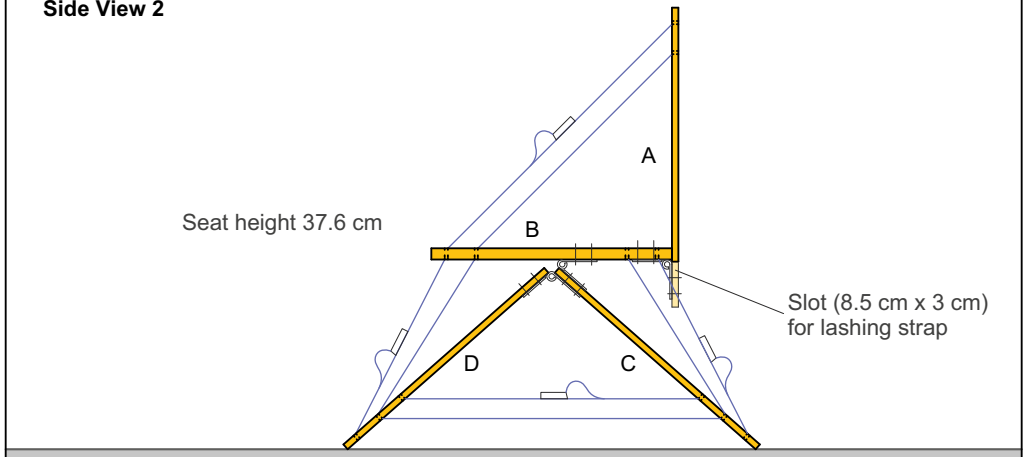
Concrete Design: A-Flex Furniture System: A-Flex No. 9 / Adjustable Chair

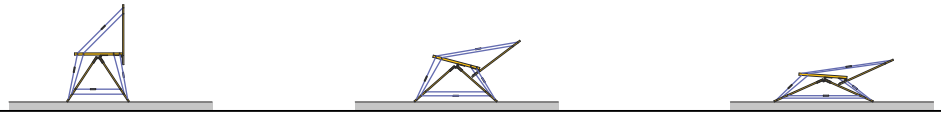
Top View





Side View 2





A-Flex Furniture System: A-Flex No. 9 / Adjustable Chair
Number of A-Flex modules: four
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2023)

Symbol Legend:

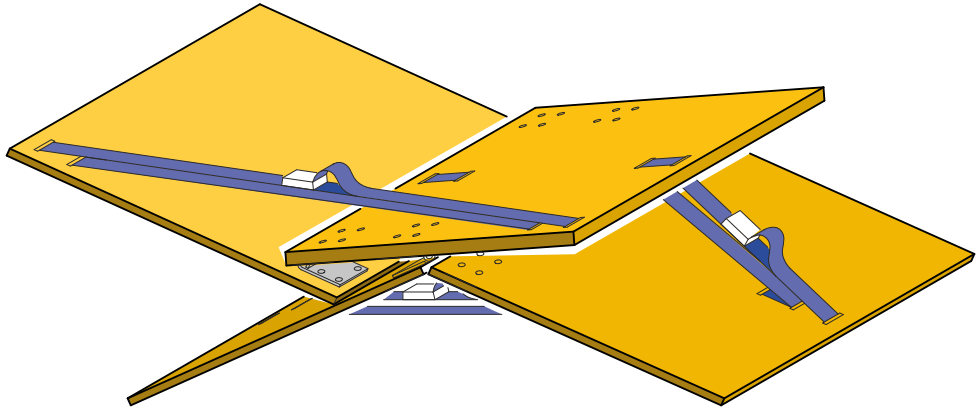
A Multiplex panel 56 x 45 x 1.2 cm with 2 pre-drilled slots for one lashing strap and with one slot (8.5 cm x 3 cm) for another lashing strap
B Multiplex panel 45 x 45 x 2.1 cm with 6 pre-drilled slots for 3 lashing straps
C, D Multiplex panel 50 x 45 x 1.2 cm with 2 pre-drilled slots for lashing straps

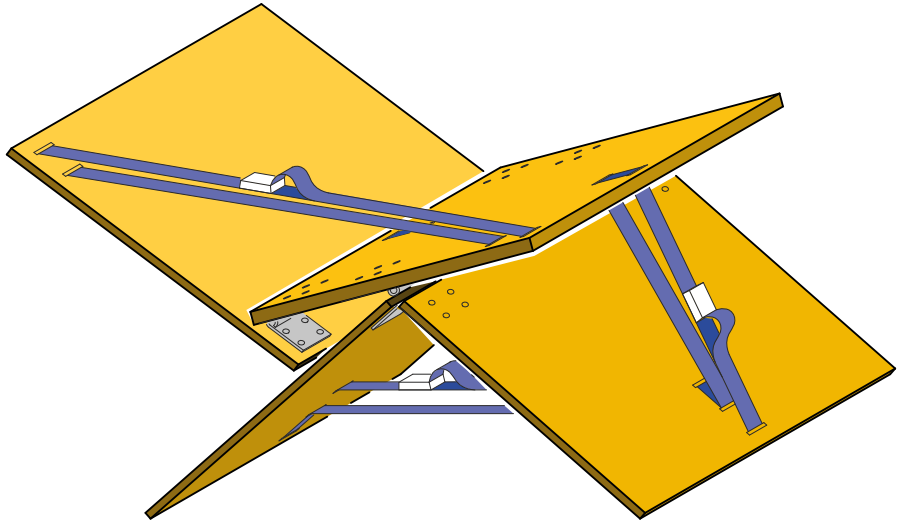
6 hinges 13 x 5 x 0.4 cm with eight holes for 6mm threaded screws, pin approx. 8mm

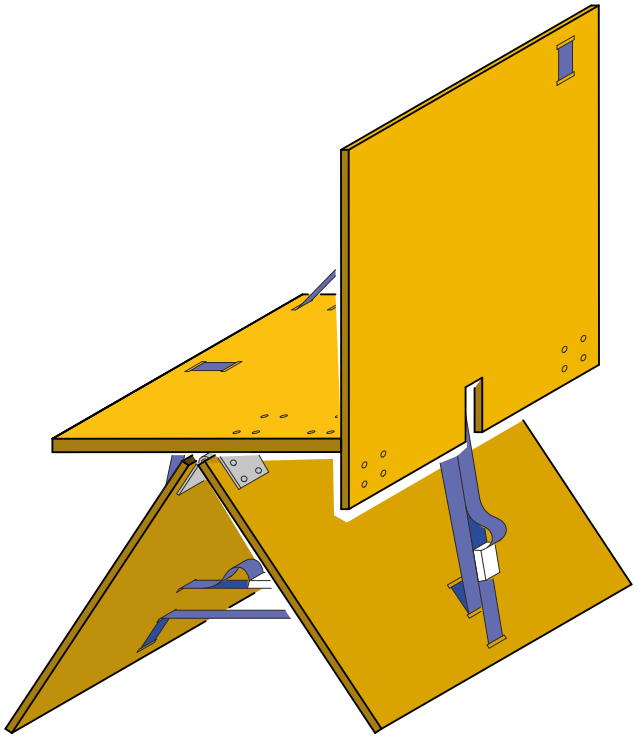
4 lashing straps 2.5 x 250cm

Concrete Design: A-Flex furniture system: A-Flex No. 9 / Adjustable Chair

Parallel projections - examples of possible angles (angles are infinitely adjustable)





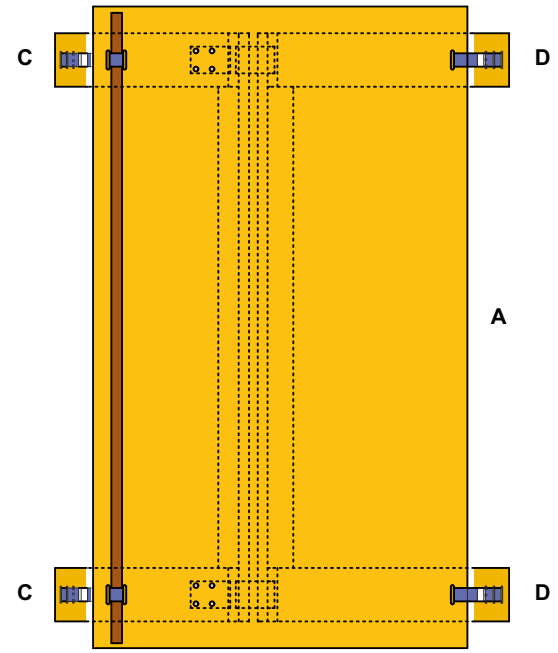


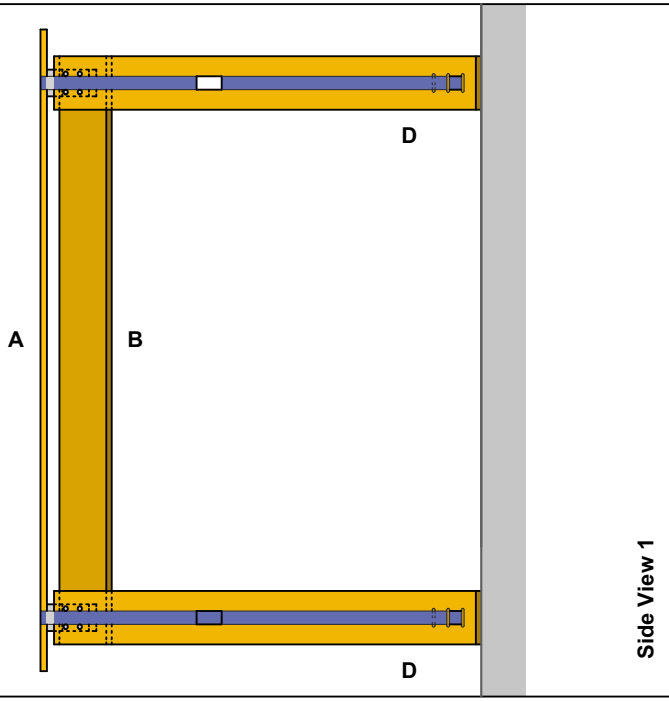
Concrete Design: A-Flex Furniture System: A-Flex No. 10 / Folding Table

Concrete Design: A-Flex Furniture System: A-Flex No. 10 / Folding Table

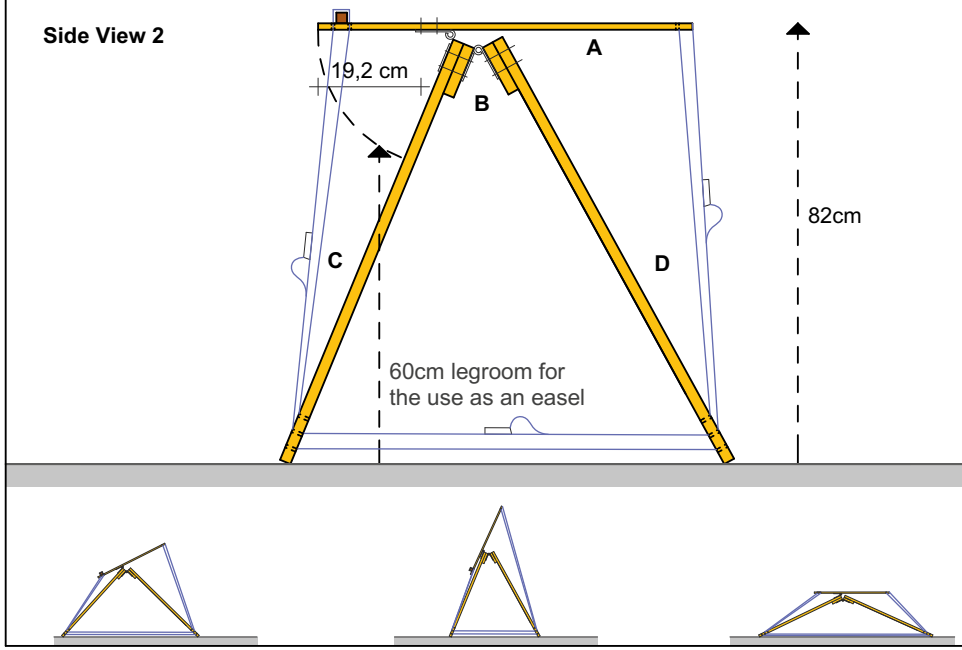
Concrete Design: A-Flex Furniture System: A-Flex No. 10 / Folding Table

Top View





Side View 2



A-Flex Furniture System: A-Flex No. 10 / Folding Table
Number of A-Flex modules: three
Scale: 1:10 (printed on DIN A3)
Author: Axel Rohlfs (2024)

Symbol Legend:

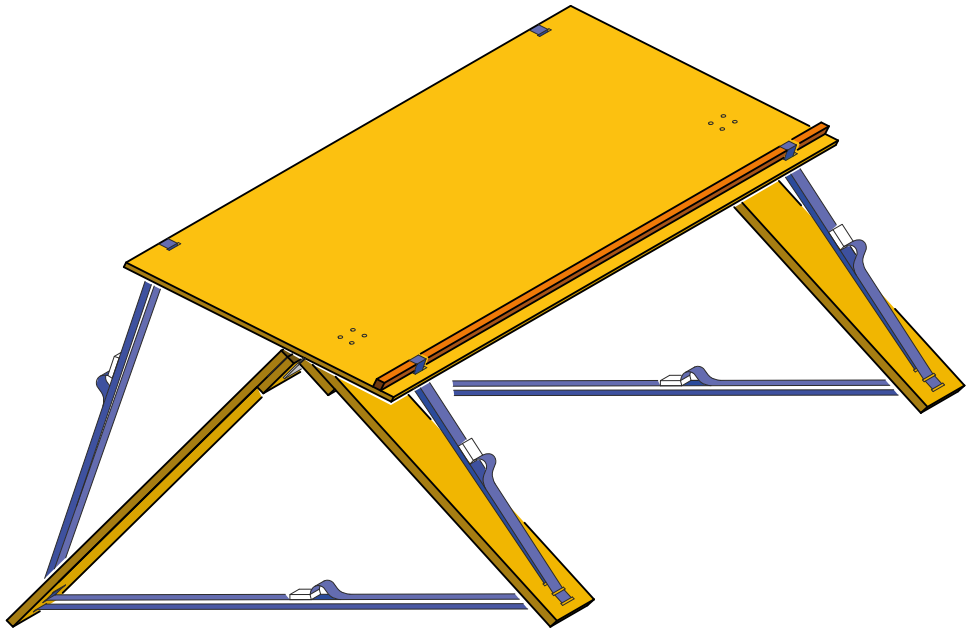
A Blockboard 70/120/1.6cm with 6 pre-drilled slots for 4 lashing straps, one 2.0cm x 2.0cm wooden strip can be fixed with two lashing straps for the use as an easel
B 2 x Multiplex 110/10/2.1cm with four hinges
C 2 x Multiplex panel 85/10/2.1cm, each with three pre-drilled slots for 2 lashing straps
D 2 x Multiplex 90/10/2.1cm, each with 3 pre-drilled slots for 2 lashing straps

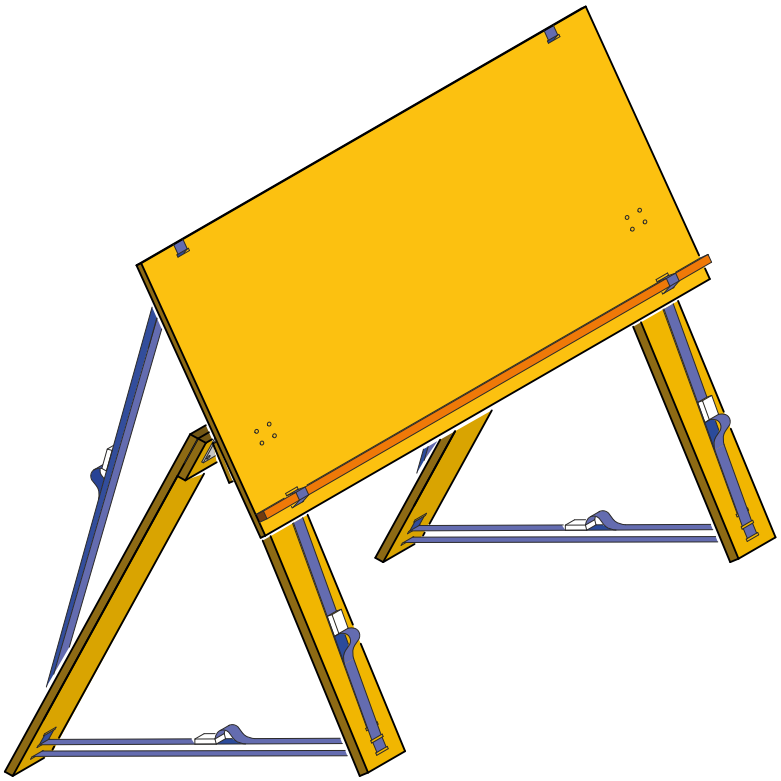
4 hinges 13 x 5 x 0.4cm with eight holes for 6mm threaded screws, pin approx. 8mm

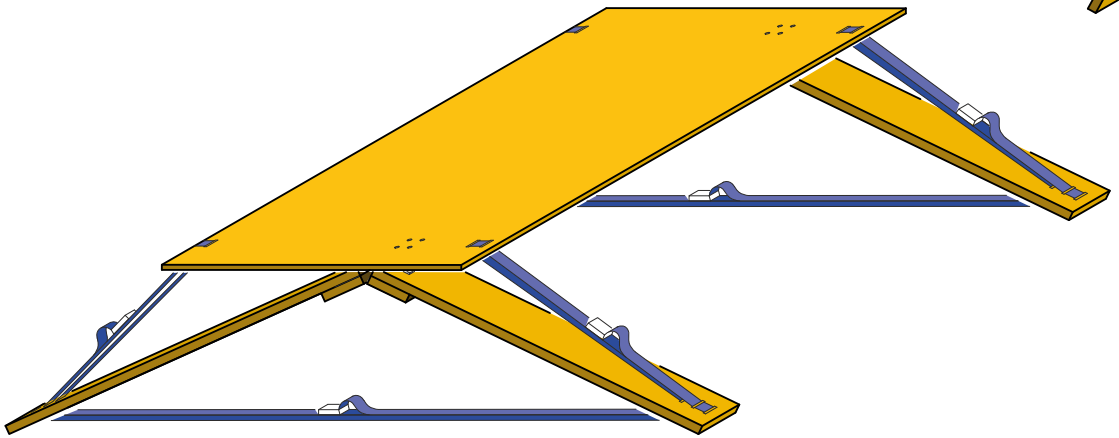
4 lashing straps 2.5 x 250cm, 2 lashing straps 2.5 x 450cm

Concrete Design: A-Flex furniture system: A-Flex No. 10 / Folding Table

Parallel projections - examples of possible angles (angles are infinitely adjustable, the 2cm x 2cm wooden strip for the use as an easel can be removed)

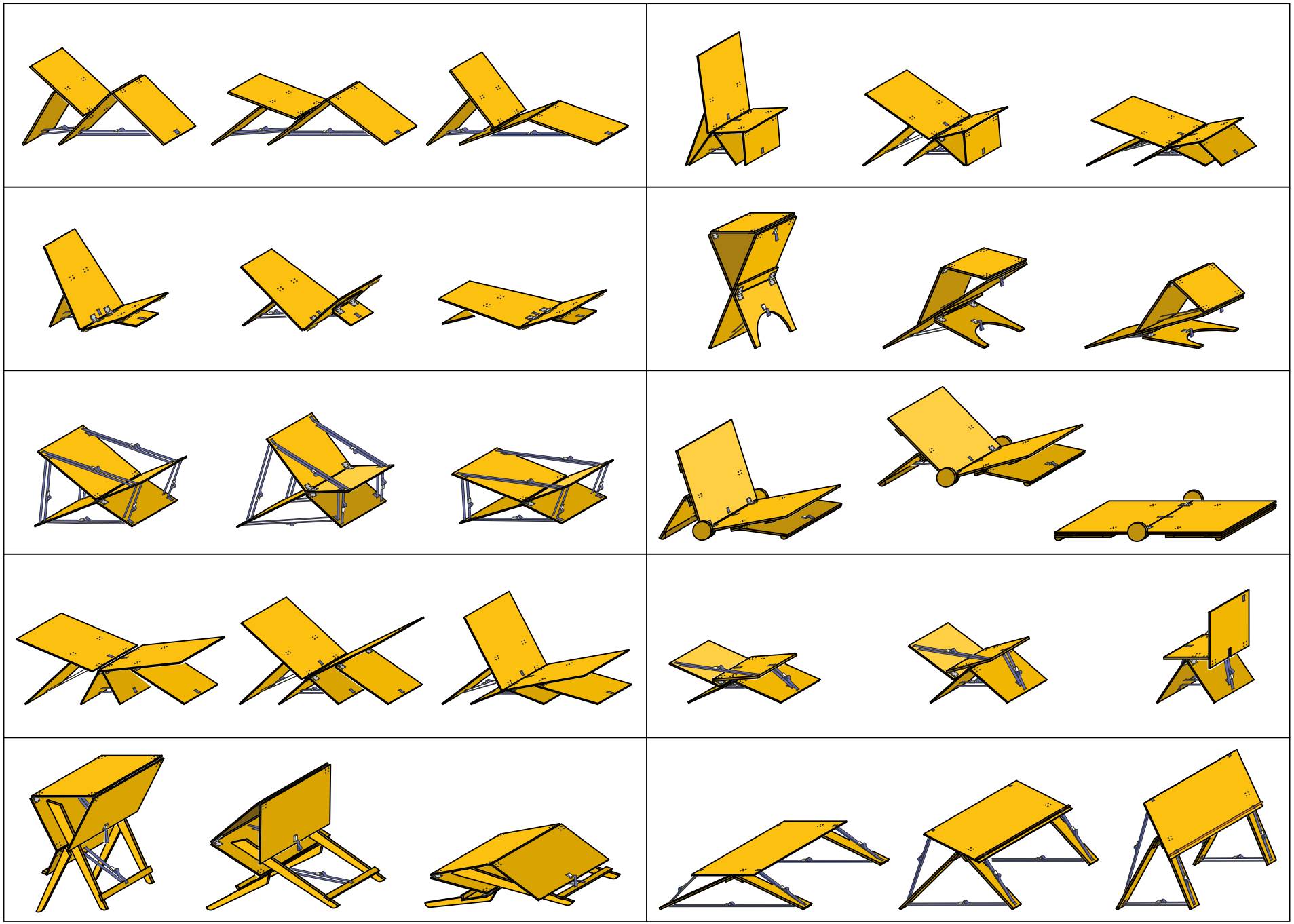


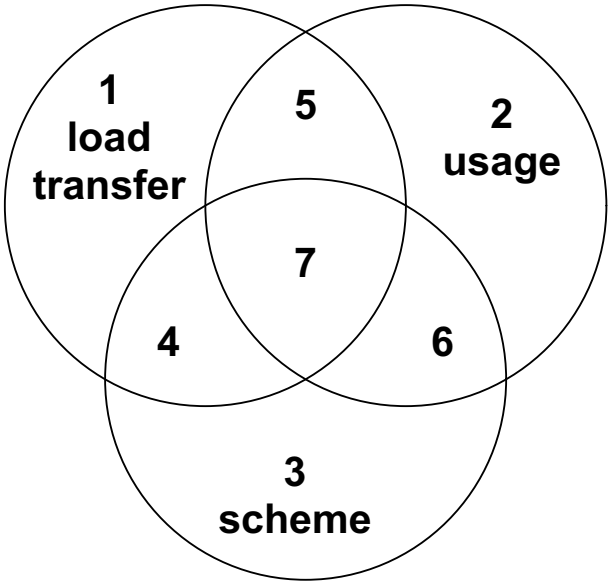




Concrete Design: schematic experience of load transfer with free use (A-Flex).

Concrete Design: schematic experience of load transfer with free use (A-Flex).





Manifesto of Concrete Design.

1) Making load transfer understandable.
In Concrete Design, load transfer is made understandable by dividing the functional object into thicker compression elements, thinner tension elements, hinge-like joint elements and separate cushioning elements as load distribution elements.

2) Making usage understandable.
In Concrete Design, usage is made understandable by dividing the functional object into object parts which are analogous to functional body parts: a support plate analogous to the upper body, a support plate analogous to the lower body, hinges analogous to body joints, lashing straps analogous to muscles, separate cushioning analogous to body masses.

3) Scheme as an explanation of space-time cognition.
In Concrete Design, cognition of (body-in-)space and cognition of (body-in-)time are brought together in a visualising interplay by means of a changeable scheme.

4) Make load transfer in the scheme understandable.
In Concrete Design, the adjustability of the load transfer geometry provides the user with an empirical-serial aesthetic from spatiotemporal variations of this geometry.

5) Making the interdependence between load transfer and usage understandable.
In Concrete Design, the interdependence between load transfer and usage is made understandable through the yielding of an elastic material during usage and through comparative sensing of the varied load flow in the varied object usage geometry.

6) Make usage in the scheme understandable.
In Concrete Design, the adjustability of the usage geometry provides the user with an empirical-serial aesthetic from spatiotemporal variations of this geometry.

7) Make load transfer together with usage understandable as a scheme.
In Concrete Design, the visible and tangible separation of compression, tension, joint and cushioning object elements from one another in a visualising scheme conveys an analogy to the corresponding body part functions and thus makes these spatio-temporal functions understandable: compression-bone, tension-muscle, hinge-joint and cushioning-body mass.

8) Metacognition as the overarching goal of Concrete Design.
The overarching goal of Concrete Design is metacognition (defined as cognition of the geometric interplay of linear-successive-temporal cognition with nonlinear-simultaneous-spatial cognition): Through temporal variation of the variable object of use, empirical-serial perceptions of space emerge, which make the contingency of the Borromean knot of consciousness-body-object perceptible for this geometric space-time metacognition.