KOHLS BUILDING AMAZING PRODUCT

DEVELOPING & MAINTAINING FIT CONSISTENCY

NOVEMBER 2023



DEVELOPING & MAINTAINING FIT CONSISTENCY



TOPICS

Updated: November 2023

- Our Goal & Role in Fit Consistency
- □ Why is Fit Consistency important?
- □ What drives Fit Consistency?
 - Standards -Tools
 - **Product Development** Analysis
 - Pre-Production Calibration
- □ What could go wrong?
 - **Production** Execution

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Develop 5-Star Products for our Private & Exclusive Brands

Deliver on the Customer's expectation for VALUE, QUALITY, FIT CONSISTENCY, and COMFORT



FIT CONSISTENCY GOAL: Execute design aesthetic accurately and achieve consistent fit across multiple silhouettes, fabrics, and vendors while meeting quality and safety guidelines in as few samples as possible.

KOHL'S EXPECTATIONS:

- *Provide <u>Fit Library</u> containing: Body Landmark Documents Grade Table & Schematics Reference or Block Patterns
- Provide Reference Pattern in Costing TP (when available)
- * How To Measure Guide for consistency
- Reference <u>Minimum Construction Standards</u> with additional construction callouts if above/beyond in Tech spec.
- <u>OnePLM CTD Training</u>
 *Support vendors questions regarding consistency and quality

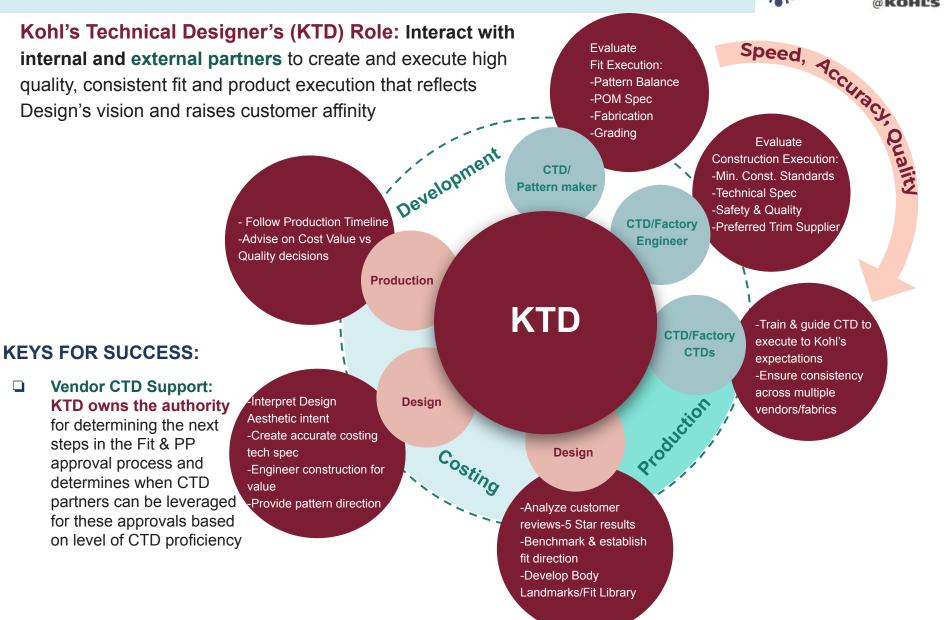
VENDOR EXPECTATIONS:

*Fit on Kohl's Dressform *Follow Kohl's Grade (in OnePLM) *Meet or Exceed Kohl's Minimum Construction Standards *Follow Kohls Product Safety & Regulatory Standards *Use Preferred Trim Suppliers *Responsible to own and deliver amazing fit *Validate that production quality follows final tech pkg *Factory Pre-Production sample must be

approved prior to production for quality assurance audit

* Applies to all Avenues of Kohl's/Vendor initiated Design/owned Development

TECHNICAL DESIGN, QUALITY ASSURANCE & PRODUCT INTEGRITY @KOHLE

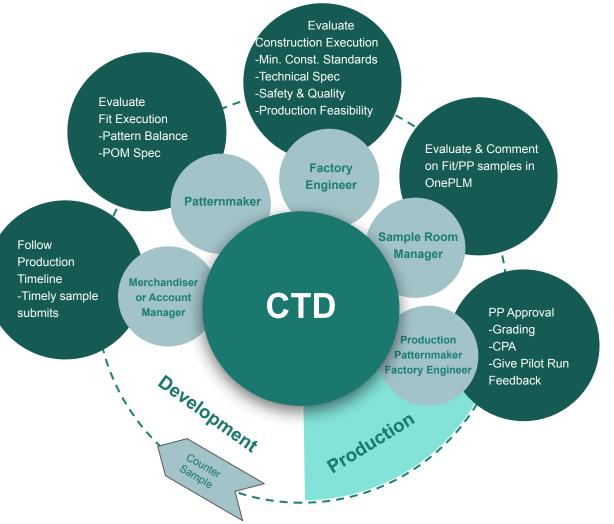




Certified Technical Designer's (CTD) Role: Interact with their internal partners to perform technical tasks on behalf of Kohl's Technical Design at levels according to their demonstrated proficiency level.

Keys to Success

- Start with a proven pattern or sloper as specified by Kohl's TD in OnePLM.
- Work closely with pattern maker through development to ensure fit consistency & pattern adjustments are made as requested.
- Communicate with KTD on any discrepancies regarding DI page, POM spec, or reference pattern shape that need further KTD direction for accurate sample.
- Inform production team and conduct a pre-production meeting to make sure all fit & construction comments are reflected in production run.



For more information on the Kohl's Certified Technical Design Program, see <u>Kohl's</u> <u>Apparel CTD overview</u> on K-Link



KOHL'S DEVELOPMENT GOAL: Delivering five star product to the customer.

KOHL'S PRODUCTION

Liaison between Merchandising, Sourcing, Design, & Vendor to ensure clarity & transparency in cost management in order to drive value through savings or investments. Supports Sourcing to execute a best in class vendor management through: quality, value, reliability & agility.

- Align with Design and Merchandising team on Line Assortment Plan development expectations
- Provide reference information at style hand-off in regard to previous assortment slot, carry-over vs new development, RFQ process or vendor placement, replenishment or Speed & Agility model
- Partner with Technical Design when considering changing key vendors that execute carry over, core & franchise programs at costing stage.
- Partner with Technical Design when considering cost engineering or vendor costing options for best value and quality

KOHL'S DESIGN

Responsible for designing into Line Assortment Plan and finding new style offerings to energize the customer and offer compelling product both online and in store to drive traffic.

- Own & share the aesthetics of the style.
- Drive and align evolutionary fit changes at Benchmark meeting.
- Articulate if style is fashion, core or franchise at Style Development Handoff.
- Provide reference information/original samples and expectations at Style Development handoff to build fit consistency

KOHL'S QUALITY ASSURANCE & PRODUCT INTEGRITY

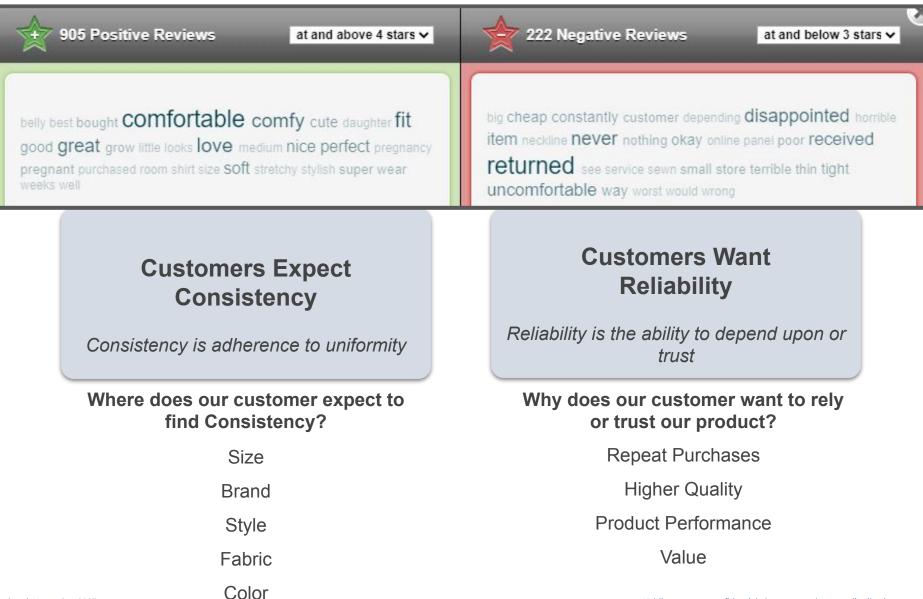
Elevate and validate quality and consistency of Proprietary Brands. Leverage the voice of the customer and selling performance to validate effectiveness of QA/PI key initiatives.

- Quality & Fit KPI Scorecard & Supplier Summaries
- Factory Technical Audits
- Product Regulatory & Safety Requirements
- Material & Product Testing
- Product Inspections / Inspectorio
- Quarterly Store Audit
- Quality Review Process (QRP)
- Chemical Management: Maintain & enforce both Product- Restricted Substance List (RSL) & Facility-Manufacturing Restricted Substance Lists (MRSL) to ensure environmentally safe & healthy products for our suppliers and customers

WHY IS FIT CONSISTENCY IMPORTANT?



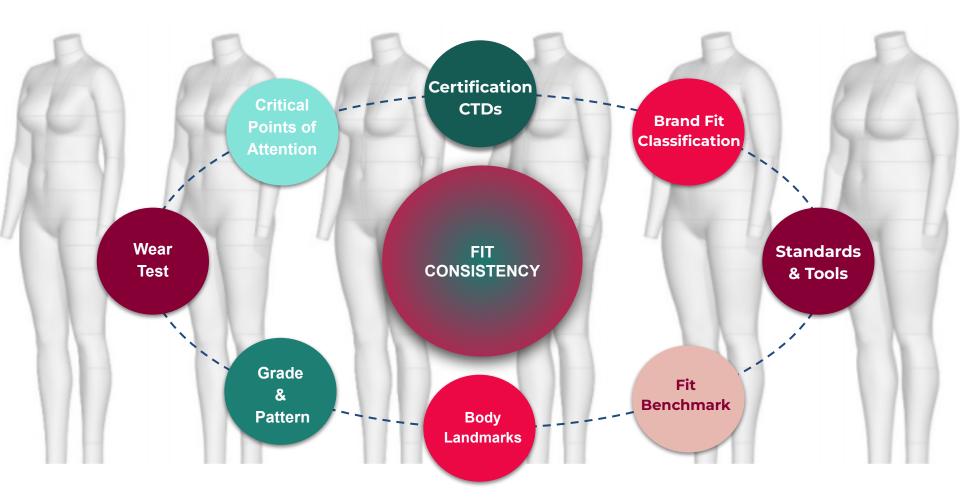
Example of Customer comment keyword summary from Ratings & Reviews



8

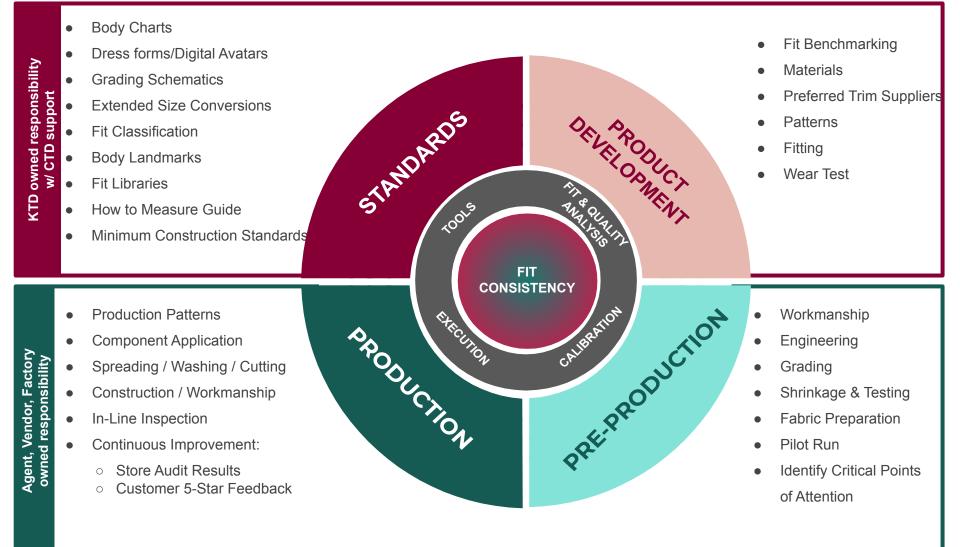
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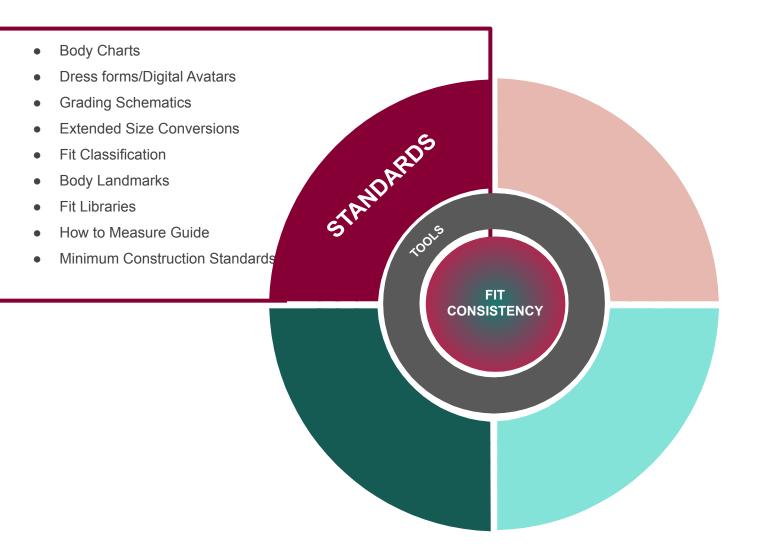




The Kohl's Technical Design Team sets standards and leads the Development Cycle. Consistency must be upheld at Agent, Vendor, & Factory to reach the Customer.







STANDARDS: BODY CHARTS/DRESS FORM



SUPPORTS FIT CONSISTENCY: Enables Technical Design to maintain consistent fit standards, and is used to review garment fit, balance, and pattern shaping.

Graded Body Charts by size range and brand can be referenced on K-Link.

Brands	All Priv	ate and	Exclusi	ve Bran	ds Exce	pt Croft	& Barro	w		
	(XS) (S)		(M)		(L)		(XL)		XXL	
SIZE (inches)	2	4	6	8	10	12	14	16	18	20
Height Range				5'4 -5'8"						
Neck at Base Circumference	14	14 1/4	14 1/2	14 5/8	15	15 3/8	15 3/4	16 1/8	16 3/8	16 7/8
Bust Circumference	33 1/2	34 1/2	35 1/2	36 1/2	37 1/2	39	40 1/2	42	44	46
UnderBust (Rib Cage) Circumference	26 3/4	27 3/4	28 3/4	29 1/2	30 3/4	32 1/4	33 3/4	35 1/4	37 1/4	39 1/4
Waist Circumference	26	27	28	29	30	31 1/2	33	34 1/2	36 1/2	38 1/2
High Hip Circ. 4" down fm waist	31 3/4	32 3/4	33 3/4	34 3/4	35 3/4	37 1/4	38 3/4	40 1/4	42 1/4	44 1/4
Low Hip Circ. 8" down fm waist	36 1/2	37 1/2	38 1/2	39 1/2	40 1/2	42	43 1/2	45	47	49
Thigh Circumference @ 1" fm crotch	20 1/2	21 1/4	22	22 3/4	23 1/2	24 1/2	25 1/2	26 1/2	27 3/4	29
Knee Circumference thru ctr of cap	13	13 3/8	13 3/4	14 1/8	14 1/2	15	15 1/2	16	16 1/2	17
Calf Circumference @ widest point	13	13 3/8	13 3/4	14 1/4	14 1/2	15	15 1/2	16	16 1/2	17
Ankle Circumference at bone	8 1/4	8 1/2	8 3/4	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2
Total Rise Length	26 1/2	26 3/4	27	27 1/4	27 3/8	27 1/2	27 3/4	28	28 3/8	28 7/8
Total Torso Length @ HPS	~	~	~	~60 3/8	~60 3/4	~61 1/4	1	1	1	~
Center Front Waist Length	12 5/8	12 7/8	13 1/8	13 5/8	13 5/8	13 3/4	14 1/8	14 3/8	14 5/8	14 7/8
Center Back Waist Length	14 1/4	14 1/2	14 3/4	15 1/4	15 1/4	15 1/2	15 3/4	16	16 1/4	16 1/2
Across-Shoulder Width	15	15 1/4	15 1/2	15 3/4	16	16 3/8	16 3/4	17 1/8	17 3/8	17 5/8
CB Sleeve Length to Wrist bone	30 1/2	30 3/4	31	31 1/4	31 1/2	31 3/4	32	32 3/8	32 5/8	32 3/4
Muscle/ Upper-Arm Circumference	10 3/8	11	11 1/4	11 3/8	11 7/8	12 1/2	12 7/8	13 3/8	14 1/8	14 7/8
Forarm Circ. @ 6" above wrist bone	8 1/4	8 1/2	8 3/4	9	9 3/8	9 5/8	10	10 1/4	10 1/2	11
Wrist Circumference @ bone	5 1/8	5 3/8	5 5/8	6	6 1/8	6 3/8	6 5/8	6 7/8	7 1/8	7 3/8
Inseam	31	31	31	31	31	31	31	31	31	31
Minimum Head Stretch	24	24	24	24	24	24	24	24	24	24

Kohl's Private & Exclusive Brands use a specific Core Fit Size with matching <u>Kohl's Dress forms</u> for the **FIT & SIZE** standard. These dress forms have matching digital avatars and have been developed based on natural scanned body shapes that represent a cross-section of the U.S. Population data scans.

See <u>The TD Toolbox - Dressform, Fit Model, & 3D Digital</u> <u>Avatar</u> for Maintaining Fit Consistency Using these Tools

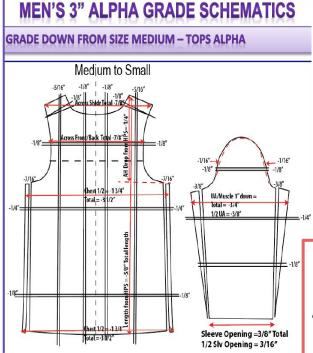


Updated: November 2023

STANDARDS: GRADING SCHEMATICS



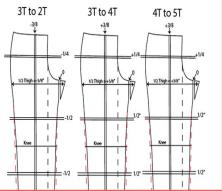
<u>Grading Schematics:</u> Provide sizing consistency across core silhouettes and between different vendors and factories for Costing / Production



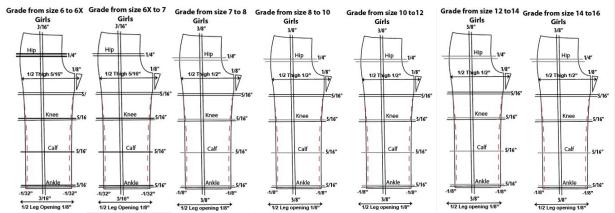
Updated: November 2023



Convert to 3T for toddler sizes:



Grading from sz 6 for kids:

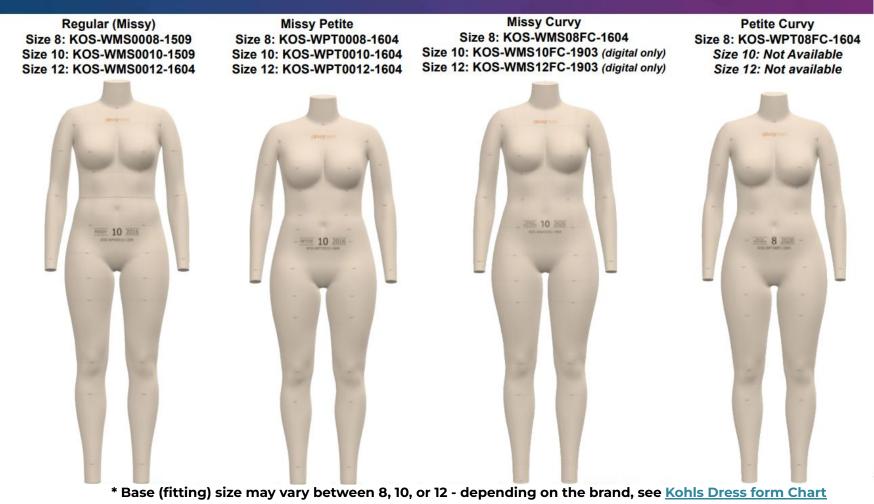


STANDARDS: EXTENDED SIZE CONVERSIONS



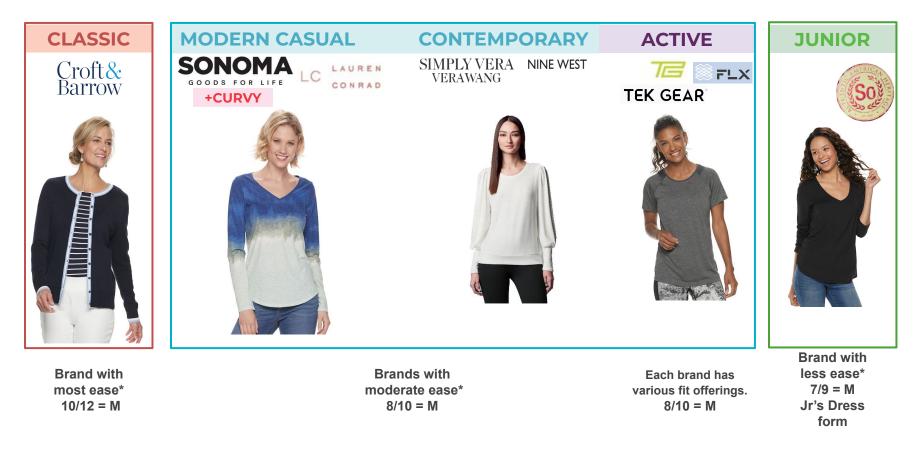
EXTENDED SIZE PROCESS & CONVERSIONS Drives Fit Consistency between Regular and Extended Sizes. **MANAGING STYLE COMPLEXITY** discusses the process and timing for developing extended sizes based on the approved Regular fit.

Dress form: Women's Regular (Missy), Petite, Curvy





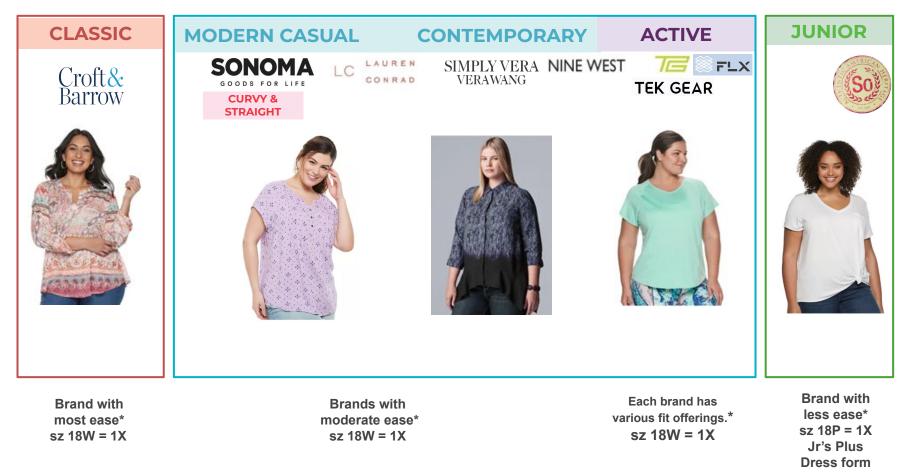
Brand Fit Classifications are aligned by body ease/proportion REG & PETITE SIZE RANGE



*ease = amount of extra fabric built into the fit



Brand Fit Classifications are aligned by body ease/proportion **PLUS SIZE RANGE**

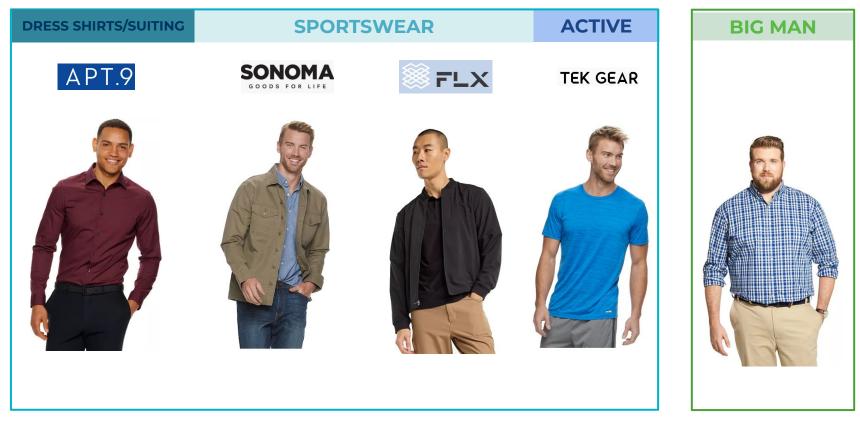


*ease = amount of extra fabric built into the fit

STANDARDS: MEN'S FIT CLASSIFICATION



REG & TALL and BIG MAN SIZE RANGE



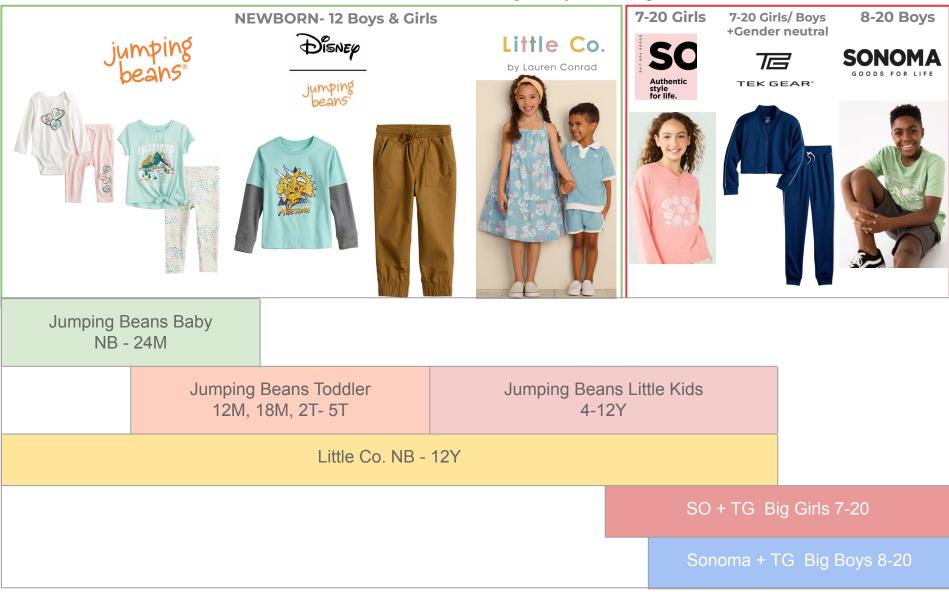
Each brand has various fit offerings. 40 Chest/34 Waist=M

Brand ease* will follow Men's Brands 52 Chest/53 Waist= 2XB

STANDARDS: KID'S FIT CLASSIFICATION



Brand Fit Classifications are aligned by Size Range



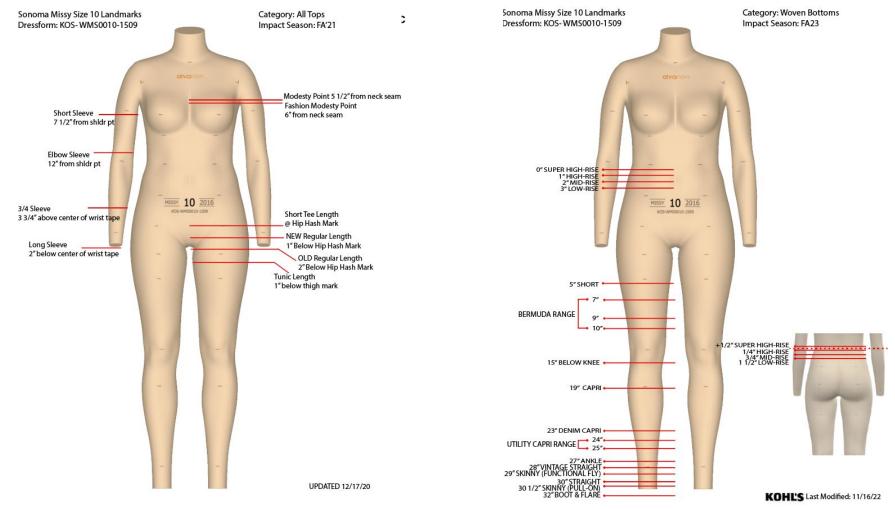
STANDARDS: BODY LANDMARKS



KTD's establish **BODY LANDMARKS** specific to each brand and category to maintain fit consistency. For Tops, Body landmarks are transposed onto bottoms for live model to wear with the top which is an effective

method in fit sessions since live model isn't marked.

Body Landmark guides are included with the Brand Fit Libraries in OnePLM.



STANDARDS: BODY LANDMARKS



SUPPORTS FIT CONSISTENCY: Each fabrication should align to the same Body Landmark regardless of spec measurement used. Fabric elongation and drape are taken into account when aligning to a body landmark vs relying on a spec measurement.



Updated: November

STANDARDS: FIT LIBRARIES



SUPPORTS FIT CONSISTENCY:

- Provides a Brand fit summary as an output of the Brand Fit Benchmarking and previous season **Core/Franchise Style Fit approvals** that are based on the **Brand Fit Classification**.
- Reference tool for new style development for vendor owned design styles in collaboration with Kohl's Design.
- Contains both **spec reference chart w/ style images** as well as **reference patterns**.
- Updated seasonally as new fits are approved/added to the Brand.
- Reference **Brand Fit Library Index** to search for Fit Library in OnePLM.
- Always reference current OnePLM POM page for measurement specs, even for carryovers. If you have concerns with discrepancies ask your KTD for clarification.

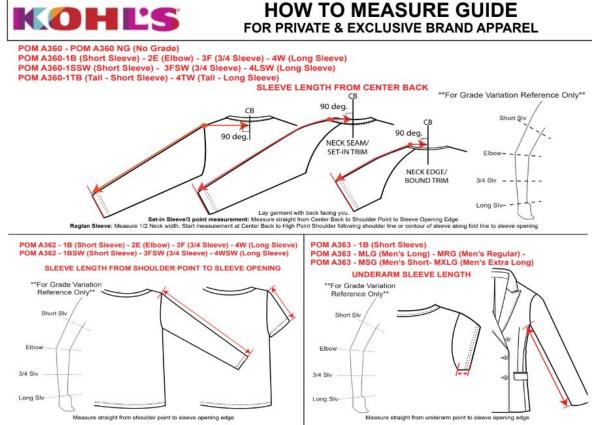
	Example	Spring 16 Misses Apt 9 Woven Tops - FitKeys					
Silhouette	Cami	Tank	SS Tee	Soft Blouse	Structured Shirt		
Product			CORM PARA				
Brand (Size)	Medium (8/10)	Medium (8/10)	Medium (8/10)	Medium (8/10)	Medium (8/10)		
Fabric Content	100% Poly Georgette	100% Poly Georgette	100% Poly Georgette	100% Poly Georgette	62%Cotton/34%Poly/4%Span		
Fabric Weight	110g/m	110g/m	110g/m	114g/m	125g/m		
SPEC	Measured	Measured	Measured	Measured	Measured		
HPS Length	25 1/2	27	27 1/2	27 1/2"/29" (at back)	27 3/4"		
க Across Shoulder		1 5/8" (strap width)	15"	15"	15 1/2"		
st Chest	37	39"	41 1/2	43"	40 1/4"		
Waist				41"	35 1/4"		
Sweep	62	43	41	43 1/2"	41 3/4"		
Sleeve Length			14 1/2	31 3/4"	32"		

STANDARDS: HOW TO MEASURE GUIDE



SUPPORTS FIT CONSISTENCY:

- <u>Kohl's How To Measure Guide:</u> Provides consistent garment measurement method of critical and non-critical **Points of Measurement (POM)** between Kohl's TDs and Vendor for style development and production execution.
- POM code reference for measurement location on body. Use for selecting the correct inseam length, sleeve length, dress lengths or hem opening POM grading options. Critical in Children's since body heights are changing from size to size and grading must be adjusted depending on the location of the hem or seam on the body.



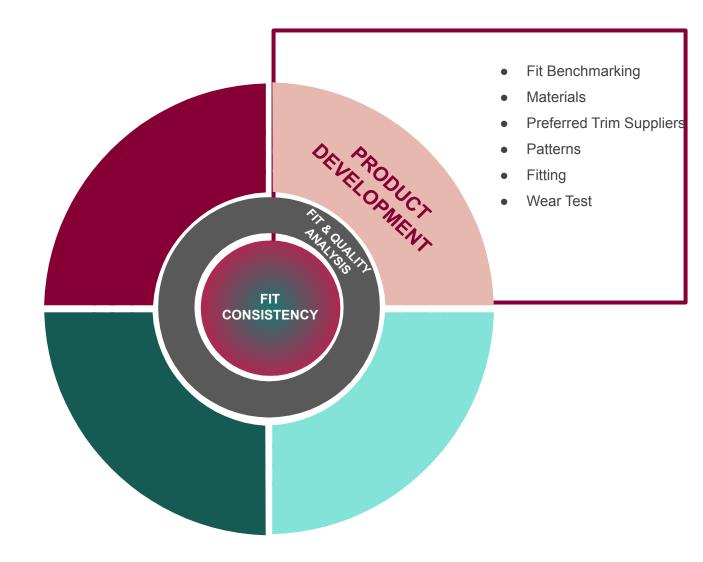


SUPPORTS FIT CONSISTENCY:

- Kohl's Minimum Construction Standards: Provide consistent garment construction methods that ensure quality and execution between multiple styles, product categories, vendors, and factories.
- Construction methods can impact fit consistency in the application of reinforcements and stabilizers in seams, armholes, necklines.

KOHĽS	MINIMUM CONSTRUCTION STANDARDS PRIVATE & EXCLUSIVE BRANDS APPAREL
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GENERAL MINIM	
CONSTRUCTION STAN	
SECTION 1: THREAD REQUIREMENTS.	
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PRODUCT DEVELOPMENT: FIT BENCHMARK



SUPPORTS FIT CONSISTENCY: Aligns Kohl's TD, Design, & Vendor on Fit Expectations based on the competitive market.

WOMEN'S SONOMA BTS23 BENCHMARK - WOVEN TOPS

Sonoma Medium	Madewell Medium	Walmart Medium	Old Navy Medium	Target Medium	Target Medium	Sonoma Medium	Anthropologie Medium
Star Rating: 4.1	Star Rating: N/A	Star Rating: 4.6	Star Rating: 4.4	Star Rating: 4.4	Star Rating: 5	Star Rating: N/A	Star Rating: 5
Landmark: ½" below Old Reg Length	Landmark: ¼" below Old Reg Length	Landmark: Old Reg Length	Landmark: ¼" below Old Reg Length	Landmark: New Reg Length	Landmark: ½" Above Tunic	Landmark: 1" below Old Reg Length	Landmark: ½" Below Tunic

- Fit Benchmark compares Kohl's fit vs Competitive Brands
- Conducted seasonally by brand & category
- KTD evaluates fit, trend, aesthetics, fabrication and customer feedback •

Fit Benchmark Outputs: May require updates to Brand Fit Library and Body Landmark charts

PRODUCT DEVELOPMENT: MATERIAL ANALYSIS





To the Kohls Customer, these are all the same pair of Jeans even though the fiber content, stretch, fabric finish and wash vary between each denim fabrication.

The KTD/CTD has to analyze all the below to develop the rise spec/pattern shape that will give the customer a consistent fit experience regardless of the color ordered.





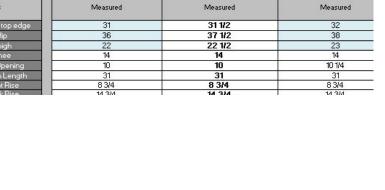
MATH - MEASUREMENTS CALCULATION

GEOMETRY - SHAPES, CURVES

PHYSICS - GRAVITY, DRAPABILITY, STRETCHABILITY

CHEMISTRY - WASH FORMULAS, FABRIC FINISHES

TEXTILES - FIBER CONTENT, WEAVE or KNIT

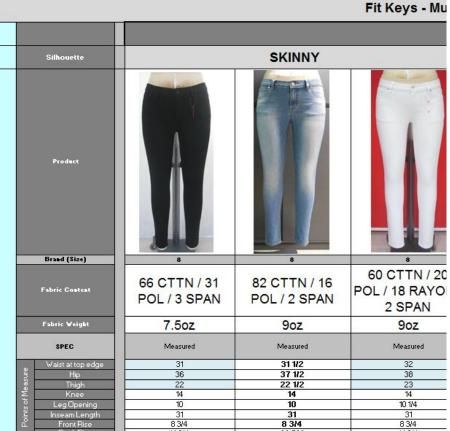


PRODUCT DEVELOPMENT: MATERIAL ANALYSIS

SUPPORTS FIT CONSISTENCY: Ensures when the customer orders the same garment in multiple fabrics, all fabrics feel the same.

Skinny Denim Example: the KTD fit approves the Medium Wash first to establish the fit intent of the style.

- The KTD/CTD team also fit/review the Black & White denim against the medium wash taking into account the fabric stretch and performance characteristics for fit consistency. KTD may need to review on Live model against the Medium wash for live model feedback on consistency.
- If measurement changes by fabrication are required to achieve fit consistency, KTD/CTD must be prepared to evaluate fit by fabrication whenever there is a change in fabric.





PRODUCT DEVELOPMENT: MATERIAL ANALYSIS





- **KTD** is responsible for determining if multiple fabrics within a style will be consistent in drape, stretch and comfort.
- This fabric comparison can be done using a fabric swatch or a full garment at either the *Style Development Handoff* or at the *Adopted Style Handoff*.
- If fabric properties are new or unfamiliar,
 KTD may reach out to CTD for fabric testing or to leverage their expertise in evaluating before splitting the POM page

CTD Role in Evaluating Fabric*

When KTD requests fit samples in multiple fabrications, CTD's can support KTD in evaluating the following prior to sending fit samples to Kohl's:

- Review both fabrications side by side on a form to confirm that the same fit aesthetic/body landmarks are being achieved with the same specs.
- If the same fit aesthetic is <u>not</u> being achieved, CTD should evaluate fabric and provide suggestions for spec adjustments to KTD.

 KTD will review suggestions and update TP to include the correct amount of POM/Fit Eval pages.

*For full process overview, see: <u>Managing Style Complexity</u> - Multiple fabrications.

PRODUCT DEVELOPMENT: TRIM ANALYSIS





- Functional Non-Aesthetic trims such as Interlinings, Elastics, and Thread. KTD reviews for function, application, and execution in the garment. This includes appropriate weight, size, stiffness, recovery power, etc.
- Functional Aesthetic Trims such as zippers, snaps, buttons. These are submitted to **Design** for Aesthetic approval, but **KTD** will review function in physical fit sample and make recommendations to the design team if the trim size/application does not work for the garment.
- Garment Main Label Execution KTD will review the execution of the label attachment to make sure label is applied correctly and type of label specified does not cause any quality issues.

CTD Role in Evaluating Trim

- Ensure that trim is sourced from a <u>Kohl's</u> <u>Preferred Trim Supplier</u> - see K-link for <u>Preferred Trim Supplier Matrix</u>.
- Evaluate the trim functionality with the material, and proactively provide alternative options, mock-ups. or suggestions if specified trim does not function or execute well with the garment construction, fabric weight, etc.
- Review Garment Main Label Execution according to <u>Label Application and</u> <u>Execution Standards</u> and provide recommendations if there are concerns with ability to execute in production and maintain quality

PRODUCT DEVELOPMENT: PATTERN ANALYSIS

PATTERN APPLICATION



SUPPORTS FIT CONSISTENCY: whenever possible, KTD will provide each style with a proven body/fit approved pattern to reference in the Costing Tech Specification. If styling is completely new, they will not include any pattern reference information.

The following topics are covered under **Pattern Application** on K-Link:



TOPICS

Who should review Pattern Application Training	Page 3
Kohls Pattern Requirements	Page 4-6
Pattern Definitions: Net, Reference, & Block Patterns	Page 7-14
Where to find Patterns	Page 15-16
How to use Reference Patterns	Page 17-23
Guide for Reviewing patterns	Page 24-40
Applying Shrinkage	Page 41-45
Applying Grading & Size Variation Conversions	Page 46-48
Submitting Pattern & Grading questions	Page 49-53
Submitting Marker & YY Calculations	Page 54
Patternmaker Questions to ensure consistency	Page 55
Appendix A: Pattern Export/Import Settings	Page 56-60

Vendor Pattern Attachment Naming Convention



SUPPORTS FIT CONSISTENCY: Kohl's TD's use a consistent live fit model to evaluate fit comfort and consistency feedback as well as model and garment movement. Live Model **FITTINGS** are held at **standard fit times each week**.

CTD FITTING SUPPORT:

- to arrivo 1.2 days prior to the fitting to
- Verify weekly live model fit days with KTD. Plan to send the sample to arrive 1-2 days prior to the fitting to ensure the sample is included on the live model fit schedule. Live models are cancelled if there are not enough samples to fit.
- Notify KTD when the fit sample is sent and include the AWB/Tracking #. This gives KTD visibility of the fit sample and KTD can track sample to see if it will arrive in time for the fitting. Do not combine samples for multiple recipients in one package unless properly labeled, see <u>Communication Expectations</u> for best practices.
- Maintain fit sample turn time/due dates as noted in the Kohls Fit Sample Policy, to allow for enough time to solve fit/construction issues as well as approving other extended sizes before Pre-Production approval deadline. If fit sample is not able to meet the deadline, email KTD with reason, expected sample date and or offer other alternatives such as reviewing correction in 3D if that is an option.
- Understand the **type of style** being reviewed and how it relates to **measurement consistency**:
 - □ **Core fits,** may require a more strict adherence to meeting requested specification, but fabrication changes may require spec adjustments for fabric elongation and drape.
 - **Fashion silhouettes** may have more flexibility for spec adjustment and spec suggestions may be needed.
 - □ CTD should always note if measurement doesn't meet spec, what their suggestion is for the next step based on the type of style being reviewed. If CTD is unsure if sample should be sent based on sample measurements, then ask the KTD for clarification.







KTD FITTING PREPARATION:

Goal: Kohl's Technical Design team prepares for a fit session to confidently and efficiently run the fitting with the design team.

Kohl's Technical Design:

- Preview samples on the dress form prior to the fitting (See <u>FIT ANALYSIS</u>, next slide).
- □ Check critical measurements and construction.
- Review grading, confirm it is up to date and appropriate for the style.
- Review fit comments from previous fit sample to determine if requested corrections have been executed.
- Review current vendor comments or questions to address with the CFT during fitting.
- □ Organize samples & fit evaluations in order according to priority: 1st x-factory date & units.
- Review Fit Model measurements prior to the fit session. (re-measure model every 30 days).
- Bring fitting tools: camera, chalk, measuring tape, pins, masking tape, scissors.
- Bring previous fit sample to the fitting: For *Core/Franchise* item bring last fit or PP approval.
- Bring Body Landmark Chart, Benchmark recap (if applicable), and Product Costing recap for Counter Sample (for 1st fit sample fitting).
- Send out fit meeting invite to CFT with style #s and description prior to fitting. (ex: WAPR251002 - 1st fit Button Down Blouse)

Kohl's Design:

Bring inspirational samples to the fitting.







FIT ANALYSIS:

- Refer to the Standards/Tools: Body charts, Dress form Chart, Body Landmark, Fit Classification, Fit Library specific to the Brand/category.
- □ Reference <u>GARMENT BALANCE</u> and <u>GARMENT FIT</u> training to analyze fit.
- □ Some **Garment Balance Issues** can not be noticed until garment is tried on a **live model** and the model **moves** in the garment.
 - All new fits should be analyzed on a live model at least once when confirming the fit.
 - The garment should adjust naturally to body movement without strain. When not moving, the garment should relax and return to its natural position, without clinging, binding, twisting, falling to the back or hiking up.
 - If garment adjusts out of balance after model movement, this may indicate a fit or pattern balance issue. If unsure if garment movement is due to model shape, then other live models can be used to verify if the fit issue is consistent.
- KTD should identify if there are any corresponding garments that the sample should be fit with and note in the Fit Evaluation under 'Fit With' field. Be sure to have these garments available if KTD has requested CTD review/photograph samples with those garments. Examples include:
 - □ Infant/Newborn correct size diaper included on the dress form
 - Outerwear may request to review sample over another layer
 - Bra/Foundation Some styles may be reviewed with a Bra or foundation garment to verify foundation coverage
- Reference **How to Fit videos**:

How to fit knit tops How to fit woven shirts How to fit Men's bottoms







KTD FITTING CHECKLIST:

Goal: Kohl's Technical Design team runs the fit session keeping the focus on delivering amazing product and fit consistency.

Kohl's Technical Design:

- □ Introduce each style with style #, description, units, vendor Pre-Production deadline.
- Summarize sample execution from fit preparation analysis regarding fit, construction, and quality noting concerns or improvements.
- Discuss all fit issues & vendor comments and offer pro-active solutions.
- □ Mention critical measurements out of tolerance if sample fit execution looks poor.

Kohl's Design:

- □ Note any changes regarding in-store timing or information since previous fit/ hand-off.
- Address aesthetic fit intent, incorporate notes from Product Review (if applicable).
- Inform TD on how the garment is to be worn with other garments and store presentation expectations ex buttoned placket, rolled sleeve or cuff.

Kohl's Technical Design:

- Executes fitting with focus on product comfort, functionality/movement, & construction details.
- Express concern regarding any changes affecting a production-friendly execution or production timeline.
- □ Summarize fit changes and align on Design Aesthetic Approval for each style.
- Determine sample status and next steps to determine if Design Aesthetic can be approved via photo or must be seen on live model.
- Take photos or video that will add clarity for vendor on comfort, function, and movement on live model.
- **NOTE:** Same style in a different fabrication should be reviewed by KTD (or CTD if KTD has given authority) with previously fit approved fabrication. Since Design intent is established on 1st fabrication, the other fabrications do not need to be reviewed with Design for Aesthetic approval.

PRODUCT DEVELOPMENT: WEAR TEST ANALYSIS



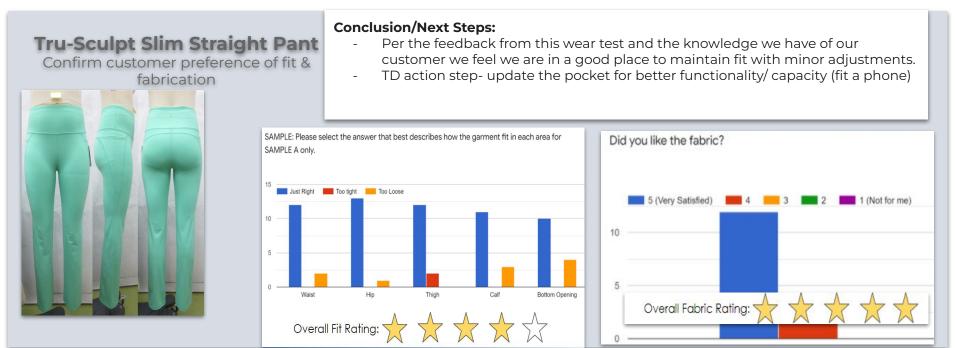
Objective

- Evaluate Fit and Comfort as it relates to Silhouette, Fabric, enhanced Construction, or grading evaluation
- Provide insights to Customer's perspective
- Elevate Quality and Consistency
- Improve Customer Satisfaction & Rating

Approach

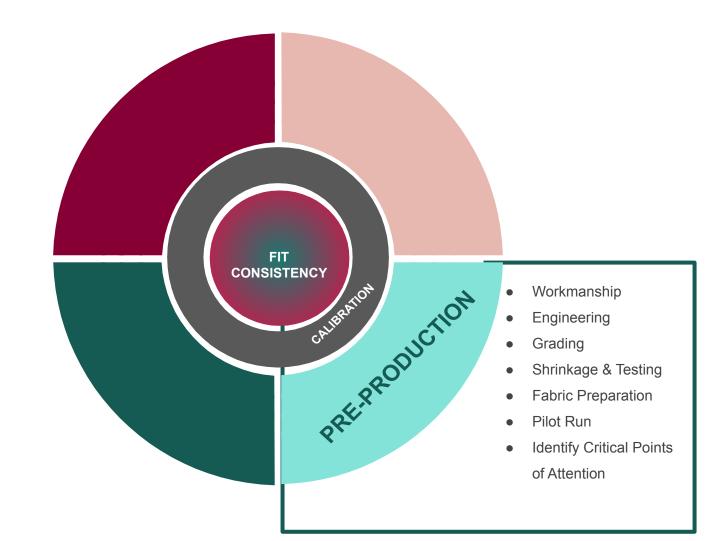
- Conducted seasonally or on an as needed basis
- May perform an in-office try on, or distribute samples for extended wash/ wear analysis
- Partner with PD/Design to focus on style evolution of core essentials; styles that are high volume or high visibility; styles that are being re-engineered from poor customer reviews, vendor change.
- Styles reviewed for: Fit, Comfort, Styling, Fabric, Performance and Durability, or grading evaluation

Output Verify customer satisfaction and/or next steps needed prior to fabric commitment or fit approval



Updated: November 2023





PRE-PRODUCTION: CALIBRATION



SUPPORTS FIT CONSISTENCY: The PP meeting is an opportunity for CTD and Factory Technicians to exchange information, review the Pre-Production Sample together to clarify expectations and consistency between the PP sample and production.

PP MEETING TOPICS:

- Review <u>Critical Points of Attention</u> to eliminate defects and drive consistency in production.
- Discuss fit and construction standards.
- Review sample on Dress Form Compare PP approval with previous Fit approval and Fit approval comments.
- Align on in-process steps that could be challenging and where QA should perform In-Line Inspections.
- Review additional fabrications and determine there are concerns with fit consistency or if pattern adjustments may need to be made - especially for washed programs.
- Determine if follow-up Size Run or Pilot Run is needed prior to start of production due to challenging operations or fabrication handling concerns.



PRE-PRODUCTION: CALIBRATION



PP Meeting: Discuss where is the Opportunity for Inconsistency?

Points of Risk

- Missing / Not Using Kohl's Dress Form
- Improper Fabric Preparation
- Fit Approved Pattern Not Followed
- Changing Construction vs Approval Sample
- Washed Styles Shrinkage Improperly Added
 to Pattern
- Multiple Fabric Choices in a Style
- Multiple Factories or sewing lines in different locations
- Machinery Not Regularly checked and Calibrated
- Missing Critical Points of Attention
- Not Following Kohl's Measuring Methods

Opportunities

- Compare: Fit Approval to PP Approval
- Compare: PP Approval to Top of Production
- Calibrating with CTD at Start of Production
- Thorough Verification at Start of Production, Identifying Issues, Adjusting & Correcting for Balance of Order
- Checking Symmetry in-line
- Verifying Accuracy of Execution by each Operator in line
- Using in-line Measuring & Templates
- Executing within Tolerance
- Analyzing production execution for continuous Improvement

PRE-PRODUCTION: CALIBRATION



Addressing Points of Risk in Production

What can the Factory do to drive consistency before starting production?



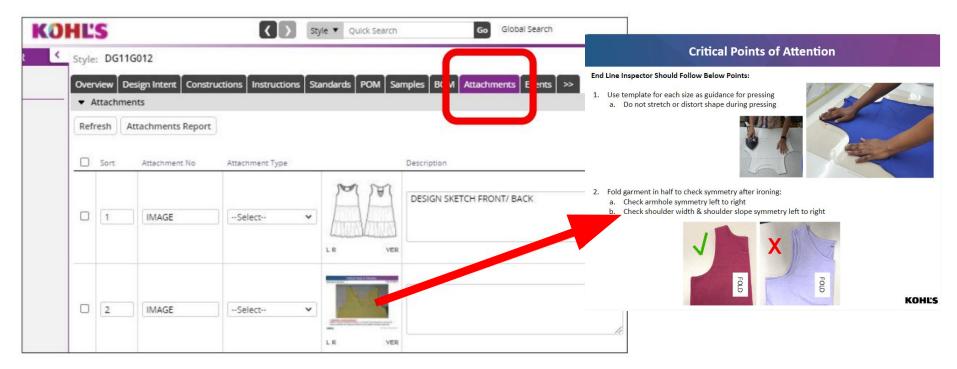
- Sew a full size pilot run to verify grading is consistent with the tech pack
- □ Verify that there is consistency from Fit Approval to PP sample to Pilot and/or Production
 - □ Validate consistency between all samples on dress form
- Verify that each fabrication within a style has the correct pattern for accurate fit and comfort BEFORE cutting
- **Verify shrinkage** on the bulk goods, grouping like bolts together and adjusting shrinkage for each "group"
- □ Post Critical Points of Attention (CPA) for each Sewing Line and inspection site
- **Provide QA the CPAs** in addition to the measurements when auditing at the end of line
- Ask **QA** to inspect at CPA and Key Measurement, esp. Children's Safety critical measurements

PRE-PRODUCTION: CRITICAL POINTS OF ATTENTION



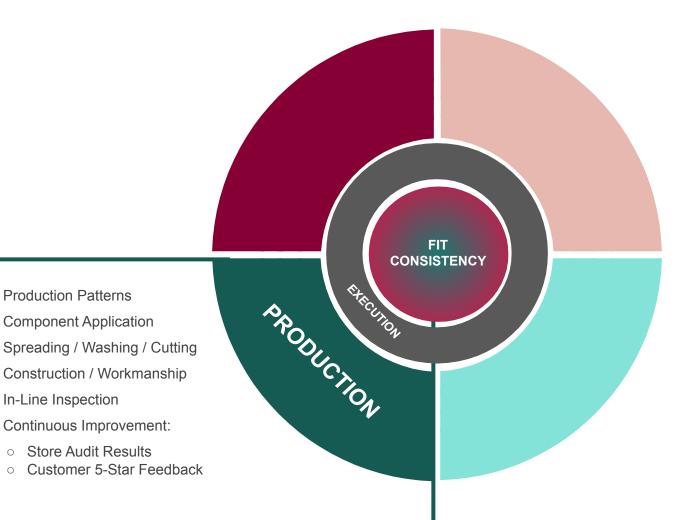
FIT CONSISTENCY GOAL: Identify potential areas of concern on the garment that can be impacted by cutting, sewing, operator handling and affect the overall fit of the garment; from size to size, between different fabrications, or different factory sewing lines.

The **Critical Points of Attention** or '**CPA**' are identified by both KTD and CTD during the development stage and documented at PP stage to assist the factory in identifying and mitigating production issues that could cause fit variation. For full process description, see <u>Critical Points of Attention</u> <u>Expectations</u>.



WHAT COULD GO WRONG?





0

0



Verify Production Execution of Multiple Fabrications

including CPA and Label Execution pages

This style owned and developed by Vendor. Vendor used same specs for all fabrications/ wash without verifying fit.

RESULTS: inconsistent fit for each fabrication, poor customer ratings.

Core Denim Fit as Expected



Too Stiff Low Stretch



Different Aesthetics High Stretch





Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

SYMMETRY ISSUES

- Neckline symmetry
- Label placement crooked and off-center

APPROVAL



PRODUCTION



Updated: November 2023

TECHNICAL DESIGN, QUALITY ASSURANCE & PRODUCT INTEGRITY

Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

MEASUREMENT & FIT ISSUES

- Waist and Hip, Out of tolerance due to improper shrinkage calculation for wash
- Too big- Falls off fit form/body





PRODUCTION



APPROVAL

Updated: November 2023



Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

APPROVAL



PRODUCTION EXECUTION & FIT ISSUES



Both layers of the stand are sewn together providing stability and collar roll.



- Layers of the stand are NOT sewn together.
- Seams have been stretched during sewing.
- Lower collar is rolling to the outside.



Updated: November 2023

TECHNICAL DESIGN, QUALITY ASSURANCE & PRODUCT INTEGRITY @ KOHLS

Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

APPROVAL

PRODUCTION

EXECUTION ISSUES

PRODUCTION





• Top of Neck Band at CF is square



Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

APPROVAL



- Armholes too low and stretched when binding applied
- Chest at armhole is too big
- Armhole circumference too big



Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

APPROVAL

PRODUCTION



- Neck shape is not smooth and rounded
- Puckering on body along keyhole seam
- Roping along keyhole opening



Verify Production Execution Consistency w/ PP/Fit Approvals

-including CPA and Label Execution pages

APPROVAL





Bottom band is set on clean

PRODUCTION



Bottom band is wavy and too long



CONTINUOUS IMPROVEMENT: GPS STORE AUDIT

Objective

- Driving Accountability by Verifying Execution
- Elevate Quality and Consistency
- Improve Customer Satisfaction & Rating

Approach

- Conducted Quarterly
- Cover entire vendor base at least one time per year
- Product Integrity: Product Performance Testing Shrinkage/ Seam Strength/ Crocking/ Wash Appearance
- Technical Design: Measurement/ Construction/ Workmanship/ Fit Consistency/ Softness/ Handfeel
- Color: Consistency

Output

- Through the Store Audit Process we work to Improve the Customer Experience and Perception of Product Quality
- Audit results are shared with vendors & LF partners

Audit Low Performer Process < 80							
Investigation	Vendor & PD Communication	Corrective Action Plan Identified	Re - Audit				
PI / QA / TD Collaboration Sales & Unit Volume Root Cause Identified	QA - QRP Process Share out findings with Vendor & PD Team to start CAP for future development	<i>Vendor</i> CAP to be provided by vendor and shared out with CF partners	<i>PI / TD / Color</i> Audit again once corrective plan has been executed Report Findings				



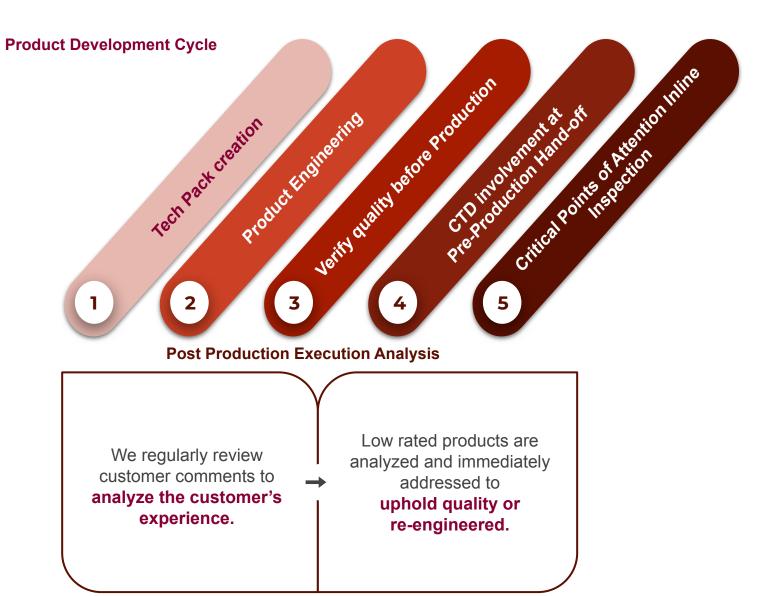
	Example of Store Aud
	C&B LS Men's Easy Care Polo
Audit Results	68
TD Score	21 / 45 Uneven HemsKeep in mind that this style is supposed to have a 1" front/back length difference, Crooked/Curved Plackets, No vertical line tack to secure hem overlap, Overall, workmanship was very poor. There were several untrimmed threads on the garments. SPI varied a lot between different areas of topstitching 8 SPI on armhole topstitch 15 SPI at bottom of placket 9 SPI on side of placket
PI Score	
Color Score	Colors were slightly yellow
5 Star Rating	4.0 (72)
Fiber Content	60% Cotton 40% Poly
Fabric Weight	203g/m²



F	Example of Store Audit Low Performer Results				
	Sonoma Women's SS V Neck				
Audit Results	76				
TD Score	21 / 45 Hand feel was dry and thin, when tried on neck stood away from body and would not lay flat. Neck widths were inconsistent, Neck width almost seems too wide on all styles. Fabric looks skewed		alve non Approved Fit	alvinon Store Sample	
PI Score	45 / 45				
Color Score	10 / 10				
5 Star Rating	4.3				
Fiber Content	60% Cotton 40% Poly				
			SONOMA The Exercise The Exercis		



CONTINUOUS IMPROVEMENT: Engineering for 5-Star Product





CONTINUOUS IMPROVEMENT: CUSTOMER REVIEWS

Example: Multiple Customer Reviews for "doesn't fit" combined with "runs small", "need to buy a different size", or "needed to size up" are all indications of a problem.

Analysis:

- Review Fit / PP approval against core Fit Library/Brand Classification to determine if fit approval strayed too far away from the core brand fit expectation for styling ease.
- Review Fit / PP approval against multiple store samples in multiple colors/fabrics to determine if there is a production execution concern across colors or fabrications.
- Evaluate store audit results together with QA team and validate if comments are relevant and determine next steps.

When a Production Issue is found:

- Garments are out of tolerance.
- Quality execution does not meet minimum construction standards and/or follow the CPA pages or PP sample execution.
- Follow the QA protocol for next steps.

Production Issue Example:

All garments in image = size M. Wide variance in Sleeve and Body Length, out of tolerance.

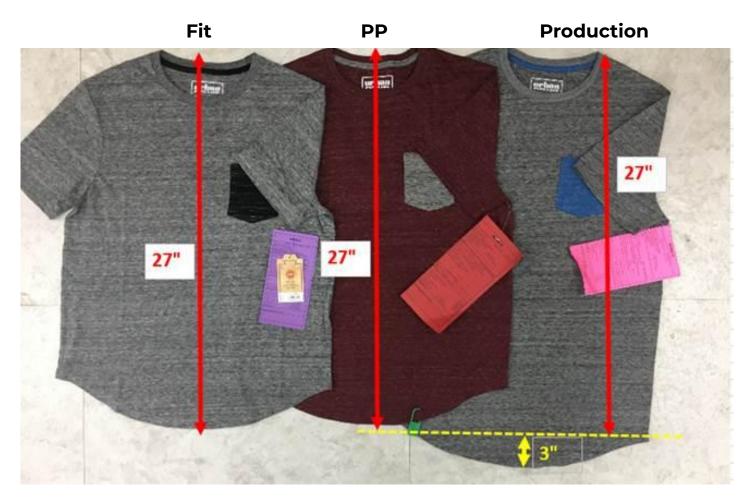




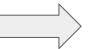
Verify Production Execution Consistency w/ PP/Fit Approvals

including CPA and Label Execution pages





Current Training Location on K-Link K-Link



Future Training Location on K-Link

LABELS AND PACKAGING Apparel CTD Level 0-1 PERFORMANCE TESTING Apparel Certified Technical Designer Training Guide COLOR SERVICES Kohl's GLOBAL TECHNICAL DESIGN Apparel Resource Tools dated training, you must click on the links from here. Apparel Body Charts, Gradin Extended Sizes **CTD Mentor Guide** This discussion guide will walk you through the necessary steps to train a CTD within CTD OnePLM Manual Orientation Apparel CTD Level 0-1 Apparel Associate TD/CTD Level 2 Apparel Technical Designer Orientation: Apparel CTD Level 0-1 TD/CTD Level 3 Apparel Mentor TD/CTD Level 4 Home CTD Mentor Guide (Last Updated: 08/23/2018) QUALITY ASSURANCE How to Measure PREFERRED TRIM SUPPLIERS POMs Assessment (Last Updated: 07/25/2018) FOOTWEAR onePLM Navigating Tech Spec Report (Last Updated: 07/22/2022) onePLM Assessment (Last Updated: 07/25/2018) Maintain Fit Consistency (Last Updated: 03/28/2018) Fit on Form Assessment (Last Updated: 07/01/2018) **Communication & Best Practices** Communication Assessment (Last Updated: 07/01/2018) Sample Submit Checklist

The training guide clearly outlines the courses, tools and resources needed to become

Click on the links in the training guide to access the training.

You may print and/or save the document to your desktop for reference only. To ensur

The Certified Technical Design (CTD) program is a training program for Domestic and about working with Kohl's on Tech Design. This orientation course is the first step in le

Kohl's Apparel CTD Overview (Last Updated: 07/22/2022)

Apparel Technical Designer Training Guide - Level 1 (Last Updated: 10/19/2021)

ONEPLM

MATERIAL MANAGEMENT

SOURCING

TIME AND ACTION CALENDAR | NOTICE OF CHANGE (NOC)

DPC

Apparel Resource Tools

Kohl's private and exclusive branded Apparel technical procedures, tools, standards, & guidelines

POLICIES AND PROCEDURES

Kohl's Fit Sample Policy (Last updated: 12/03/2020) Managing Style Complexity (Last updated: 09/06/2022) Communication Expectations (Rename Basic Communications - Last Updated: 06/01/2022) Sample Tag - All Apparel Categories (Rename All Apparel Categories - Last Updated: 09/15/2023) Critical Points of Attention Expectations (Last Updated: 07/14/2021)

FIT TOOLS



Developing & Maintaining Fit Consistency (New - Last Updated: 09/00/2023) The TD Toolbox Dressform, Fit Model & 3D Digital Avatar (Last Updated: 11/01/2020) Dress Form Chart (Last Updated: 11/10/2022) Alvanon Dress Form Order Template (Rename Alvanon Order Form Last Updated: 10/22/2020) Fit Library Index (Last Updated: 03/14/2023) Kohl's Fit comment Template (Last Updated: 11/10/2022) How to fit Knit Tops (Last Updated: 06/01/2018) How to fit Woven Shirts (Last Updated: 07/21/2023 this date is incorrect?) How to fit Men's Bottoms (Last Updated: 07/21/2023 this date is incorrect?) How to take a photo on a Dressform (Last Updated: 05/18/2021) Patterns Pattern Application (Rename Basic Pattern Application - Last Updated: 04/20/2022)

Vendor Pattern Attachment Naming Convention(Last Updated: 04/17/2023) linked to CTD OnePLM manual page

STANDARDS & GUIDELINES Minimum Construction Standards

General Minimum Construction Standard Manual (Last Updated: 04/25/2022) Adaptive Construction Standards (Last Updated: 04/03/2023) Tailored Construction Standards (Last Updated: 11/01/2020) Sweater Construction Standards (Last Updated: 11/01/2020) Leather Suede PU Construction Standards (Last Updated: 11/01/2020) Outerwear Construction Standards (Last Updated: 11/01/2020) Swim Construction Standards (Last Updated: 11/01/2020) Intimates Bra Construction Standards (Last Updated: 11/01/2020) Intimates Panty Construction Standards (Last Updated: 11/01/2020)





- Apparel Counter Sample Submits (Last Updated: 05/18/2021)
- Apparel Fit Sample Submits (Last Updated: 05/18/2021)
- Apparel PP Sample Submits (Last Updated: 06/10/2021)